

# FCC Test Report

Apple Inc  
Model: A3186



In accordance with FCC 47 CFR Part 15C  
(2.4 GHz WLAN)

Prepared for: Apple Inc  
One Apple Park Way  
Cupertino  
California  
95014  
USA

FCC ID: BCGA3186

## COMMERCIAL-IN-CONFIDENCE

Document 75961394-104 Issue 01

### SIGNATURE

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Tiago De Camargo Alves	Technical Support	Authorised Signatory	16 October 2024

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD document control rules.

### ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15C. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Report Generation	Rachael Watkins	16 October 2024	

FCC Accreditation  
553713/UK2026 Concorde Park, Fareham Test Laboratory

### EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15C: 2023 for the tests detailed in section 1.3.



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## Contents

<b>1</b>	<b>Report Summary .....</b>	<b>2</b>
1.1	Report Modification Record.....	2
1.2	Introduction.....	2
1.3	Brief Summary of Results .....	3
1.4	Product Information .....	4
1.5	Deviations from the Standard.....	5
1.6	Identification of the EUT .....	5
1.7	EUT Modification Record .....	5
1.8	Test Location .....	6
<b>2</b>	<b>Test Details .....</b>	<b>7</b>
2.1	Restricted Band Edges.....	7
2.2	Emission Bandwidth .....	77
2.3	Maximum Conducted Output Power .....	91
2.4	Authorised Band Edges .....	105
2.5	Spurious Radiated Emissions .....	136
2.6	Power Spectral Density .....	165
<b>3</b>	<b>Measurement Uncertainty .....</b>	<b>179</b>



# 1 Report Summary

## 1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	16-October-2024

**Table 1**

## 1.2 Introduction

Applicant	Apple Inc
Manufacturer	Apple Inc
EUT/Sample Identification	Refer to section 1.6
Test Specification/Issue/Date	FCC 47 CFR Part 15C: 2023
Start of Test	08-July-2024
Finish of Test	29-August-2024
Name of Engineer(s)	Ioan-Alexandru Bogatu, James Woods, Morsalin Hossain, Mahmud Bari Chowdhury, Elliot Callender and Ian Hart
Related Document(s)	ANSI C63.10 (2020) KDB 662911 D01 v02r01



### 1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15C is shown below.

Section	Specification Clause	Test Description	Result	Comments/Base Standard
Configuration and Mode: 2.4 GHz WLAN				
-	15.203	Antenna Requirement	N/T	The device complies with the provisions of this section, as it uses permanently attached integral antennas.
2.1	15.205	Restricted Band Edges	Pass	ANSI C63.10 (2020)
2.2	15.247 (a)(2)	Emission Bandwidth	Pass	ANSI C63.10 (2020)
2.3	15.247 (b)	Maximum Conducted Output Power	Pass	ANSI C63.10 (2020) KDB 662911 D01 v02r01
2.4	15.247 (d)	Authorised Band Edges	Pass	ANSI C63.10 (2020)
2.5	15.209 and 15.247 (d)	Spurious Radiated Emissions	Pass	ANSI C63.10 (2020)
2.6	15.247 (e)	Power Spectral Density	Pass	ANSI C63.10 (2020) KDB 662911 D01 v02r01

**Table 2**



## 1.4 Product Information

### 1.4.1 Technical Description

The equipment under test (EUT) was a portable laptop computer.

### 1.4.2 Test Modes

The EUT's 2.4 GHz 802.11 radio supports SISO (Single Input/Single Output) and 2x2 MIMO (Multiple Input/Multiple Output). It supports 802.11b and g for SISO operation and 802.11n and ax at 20 MHz channel bandwidths for SISO and MIMO. 802.11ax multi-user mode supports RU sizes of 26/52/106/242 subcarriers.

The EUT uses different output powers per core dependent on how many cores are used. It uses the same conducted power across all cores in any given mode, but due to the different antenna gains the radiated powers per core differs.

After preliminary investigations were performed, the EUT was therefore tested in the following worst-case modes unless otherwise specified:

SISO Modes (Core 1):

- 802.11b - 1 Mbps
- 802.11g - 12 Mbps
- 802.11n HT20 - MCS2
- 802.11ax HE20 SU - MCS2x1
- 802.11ax HE20 MU RU26/52/106\* - MCS2x1

2x2 MIMO Modes (Core 0 + Core 1):

- 802.11n HT20 - CDD - MCS2
- 802.11ax HE20 SU - CDD - MCS2x1
- 802.11ax HE20 MU RU26/52/106\* - CDD - MCS2x1

\*Note: The RU offset for bottom and middle channels were placed in the lowest position and on the top channel, the offset was placed in the upper most position.

### 1.4.3 Test Setup

For conducted tests the EUT antennas were disconnected and replaced with U.FL to SMA test cables to enable conducted testing on each core. The loss of these test cables was known and compensated for in any conducted measurements.

For all tests, the EUT was put into a continuous transmit test mode with the chipset manufacturer's test commands. The EUT then transmitted the required type of packeted 802.11 data frames of fixed length, containing the standard headers and with pseudo-random data content, ensuring the measured signals were representative and contained all the symbols at the highest power control level.

All testing was performed with the EUT powered via a 120 V AC, 60 Hz source.



**1.4.4 Antenna Gain Table**

Antenna Port	Frequency Range (MHz)	Peak Gain (dBi)	Conducted Cable Loss (dB)
Core 0	2400 to 2480	3.3	0.71
Core 1	2400 to 2480	6.3	0.71

**Table 3**

**1.5 Deviations from the Standard**

No deviations from the applicable test standard were made during testing.

**1.6 Identification of the EUT**

The table below details identification of the EUT(s) that have been used to carry out the testing within this report.

Model: A3186			
Serial Number	Hardware Version	Software Version	Firmware
GQFXQXKN7J	REV1.0	24A32191n	23.30.16
FQHPMW6WWW	REV1.0	24A32191n	23.30.16
LXXD3YHT0L	REV1.0	24A32191n	23.30.16

**Table 4**

**1.7 EUT Modification Record**

The table below details modifications made to the EUT during the test programme.

The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Model: A3186, Serial Number: FQHPMW6WWW			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3186, Serial Number: GQFXQXKN7J			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3186, Serial Number: LXXD3YHT0L			
0	As supplied by the customer	Not Applicable	Not Applicable

**Table 5**



### 1.8 Test Location

TÜV SÜD conducted the following tests at our Concorde Park Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: 2.4 GHz WLAN		
Restricted Band Edges	Ioan-Alexandru Bogatu, James Woods and Morsalin Hossain	UKAS
Emission Bandwidth	Mahmud Bari Chowdhury	UKAS
Maximum Conducted Output Power	Mahmud Bari Chowdhury	UKAS
Authorised Band Edges	Ioan-Alexandru Bogatu, James Woods and Morsalin Hossain	UKAS
Spurious Radiated Emissions	Elliot Callender, Ian Hart, Ioan-Alexandru Bogatu and Morsalin Hossain	UKAS
Power Spectral Density	Mahmud Bari Chowdhury	UKAS

**Table 6**

Office Address:

TÜV SÜD  
Concorde Park  
Concorde Way  
Fareham  
Hampshire  
PO15 5FG  
United Kingdom



## 2 Test Details

### 2.1 Restricted Band Edges

#### 2.1.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.205

#### 2.1.2 Equipment Under Test and Modification State

A3186, S/N: GQFXQXKN7J - Modification State 0  
A3186, S/N: FQHPMW6WWW - Modification State 0

#### 2.1.3 Date of Test

08-July-2024 to 01-August-2024

#### 2.1.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.10.5 and 11.12.1.

Plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.2.

The following conversion can be applied to convert from dB $\mu$ V/m to  $\mu$ V/m:

$10^{(\text{Field Strength in dB}\mu\text{V/m}/20)}$ .

#### 2.1.5 Environmental Conditions

Ambient Temperature	21.2 - 23.2 °C
Relative Humidity	41.2 - 43.2 %





**2.1.6 Test Results**

2.4 GHz WLAN

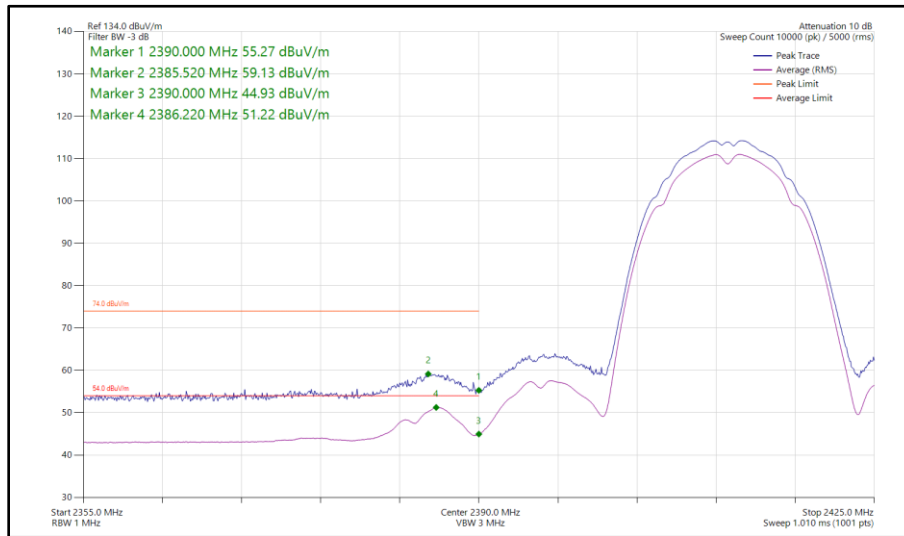
20 MHz Bandwidth - Core 0 (SISO)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBuV/m)
802.11b	1 Mbps	-	-	2412	2390	59.13	51.22
802.11b	1 Mbps	-	-	2417	2390	59.33	51.00
802.11b	1 Mbps	-	-	2422	2390	57.08	46.29
802.11g	12 Mbps	-	-	2412	2390	65.35	51.46
802.11g	54 Mbps	-	-	2417	2390	69.43	51.24
802.11g	54 Mbps	-	-	2422	2390	68.61	51.14
802.11g	54 Mbps	-	-	2427	2390	68.88	51.07
802.11g	54 Mbps	-	-	2432	2390	69.35	50.57
802.11n HT20	MCS 4	-	-	2412	2390	64.25	51.49
802.11n HT20	MCS 2	-	-	2417	2390	63.62	51.22
802.11n HT20	MCS 7	-	-	2422	2390	69.05	51.39
802.11n HT20	MCS 7	-	-	2427	2390	69.23	49.70
802.11n HT20	MCS 7	-	-	2432	2390	69.35	51.31
802.11ax HE20	MCS 4x1	SU	-	2412	2390	65.53	51.38
802.11ax HE20	MCS 9x1	106	53	2412	2390	69.27	49.04
802.11ax HE20	MCS 4x1	SU	-	2417	2390	65.22	51.44
802.11ax HE20	MCS 9x1	106	53	2417	2390	67.63	48.09
802.11ax HE20	MCS 2x1	SU	-	2422	2390	65.70	51.30
802.11ax HE20	MCS 2x1	SU	-	2427	2390	69.46	51.12
802.11ax HE20	MCS 4x1	SU	-	2432	2390	68.95	51.21
802.11b	1 Mbps	-	-	2462	2483.5	59.62	50.87
802.11b	1 Mbps	-	-	2467	2483.5	60.17	51.05
802.11b	1 Mbps	-	-	2472	2483.5	59.23	51.01
802.11g	54 Mbps	-	-	2437	2483.5	62.35	47.70
802.11g	54 Mbps	-	-	2442	2483.5	65.20	49.02
802.11g	54 Mbps	-	-	2447	2483.5	65.74	50.66
802.11g	24 Mbps	-	-	2452	2483.5	66.50	51.17
802.11g	24 Mbps	-	-	2457	2483.5	66.02	51.30
802.11g	12 Mbps	-	-	2462	2483.5	65.35	51.37
802.11g	12 Mbps	-	-	2467	2483.5	64.09	51.47
802.11g	24 Mbps	-	-	2472	2483.5	64.42	51.46
802.11n HT20	MCS 7	-	-	2447	2483.5	68.21	51.29
802.11n HT20	MCS 4	-	-	2452	2483.5	66.13	51.09
802.11n HT20	MCS 7	-	-	2457	2483.5	68.94	50.05

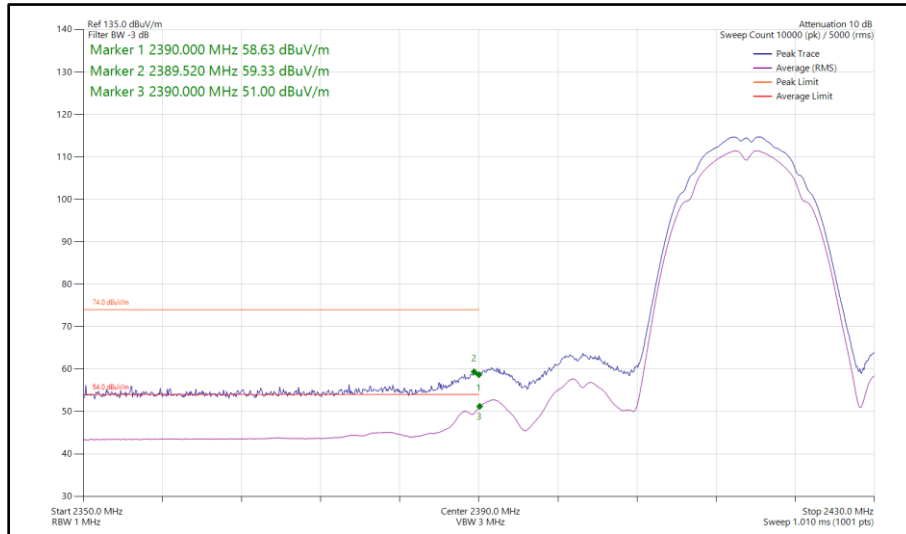


Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)
802.11n HT20	MCS 2	-	-	2462	2483.5	65.95	51.34
802.11n HT20	MCS 2	-	-	2467	2483.5	63.53	51.48
802.11n HT20	MCS 4	-	-	2472	2483.5	65.51	51.35
802.11ax HE20	MCS 4x1	SU	-	2447	2483.5	66.69	51.35
802.11ax HE20	MCS 4x1	SU	-	2452	2483.5	65.95	51.31
802.11ax HE20	MCS 9x1	SU	-	2457	2483.5	69.31	50.72
802.11ax HE20	MCS 9x1	106	54	2457	2483.5	68.55	46.79
802.11ax HE20	MCS 9x1	SU	-	2462	2483.5	65.68	51.43
802.11ax HE20	MCS 9x1	106	54	2462	2483.5	69.28	51.03
802.11ax HE20	MCS 2x1	SU	-	2467	2483.5	63.88	51.47
802.11ax HE20	MCS 9x1	52	40	2467	2483.5	68.94	51.48
802.11ax HE20	MCS 4x1	SU	-	2472	2483.5	64.36	51.11
802.11ax HE20	MCS 9x1	26	0	2472	2483.5	69.44	48.11

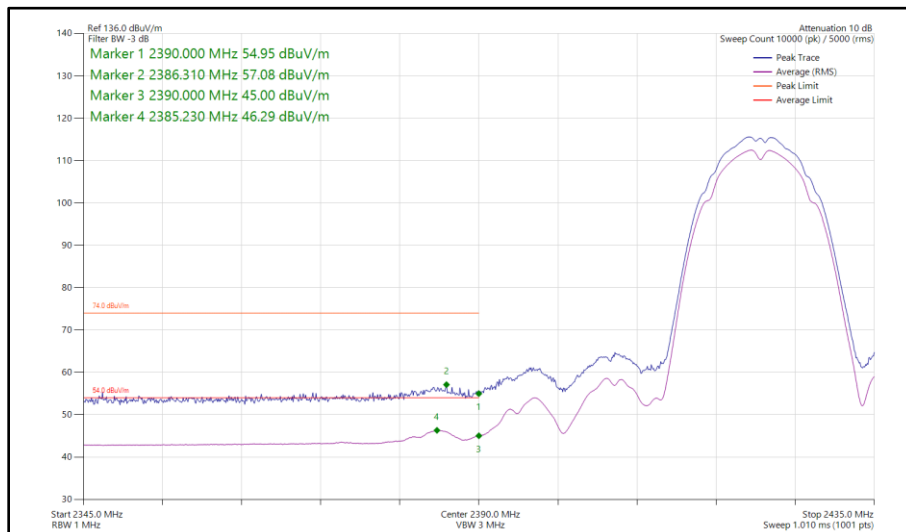
**Table 7 - SISO Restricted Band Edge Results**



**Figure 1 - 802.11b, SISO, Core 0 - 2412 MHz  
 Band Edge Frequency 2390 MHz**



**Figure 2 - 802.11b, SISO, Core 0 - 2417 MHz  
Band Edge Frequency 2390 MHz**



**Figure 3 - 802.11b, SISO, Core 0 - 2422 MHz  
Band Edge Frequency 2390 MHz**

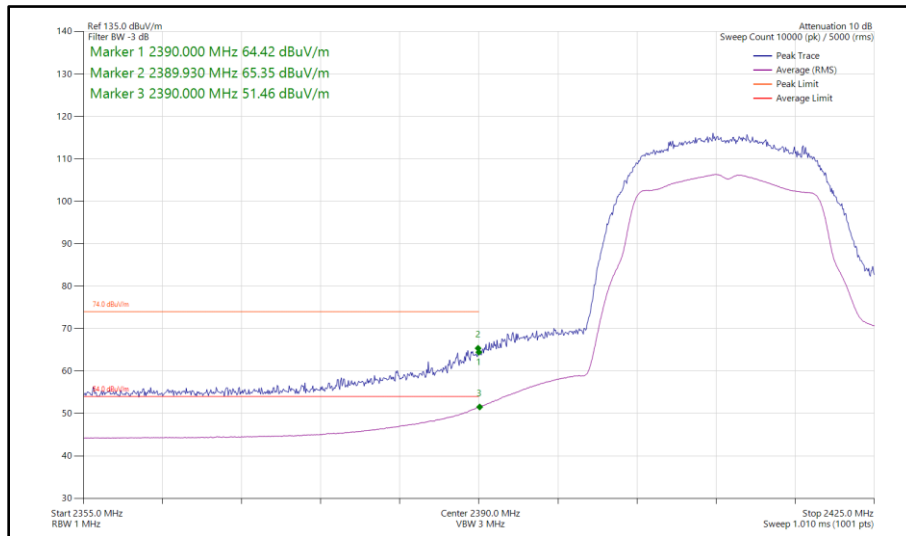


Figure 4 - 802.11g, SISO, Core 0 - 2412 MHz  
Band Edge Frequency 2390 MHz

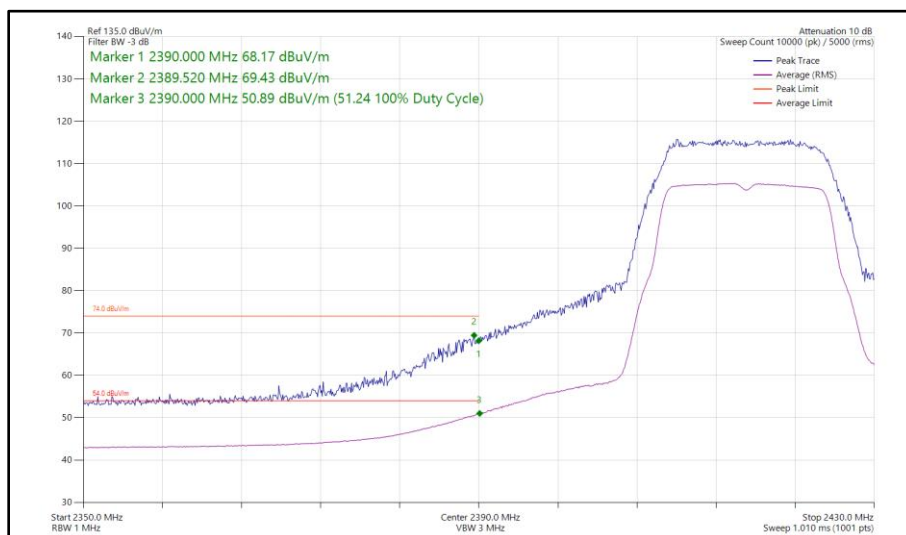


Figure 5 - 802.11g, SISO, Core 0 - 2417 MHz  
Band Edge Frequency 2390 MHz

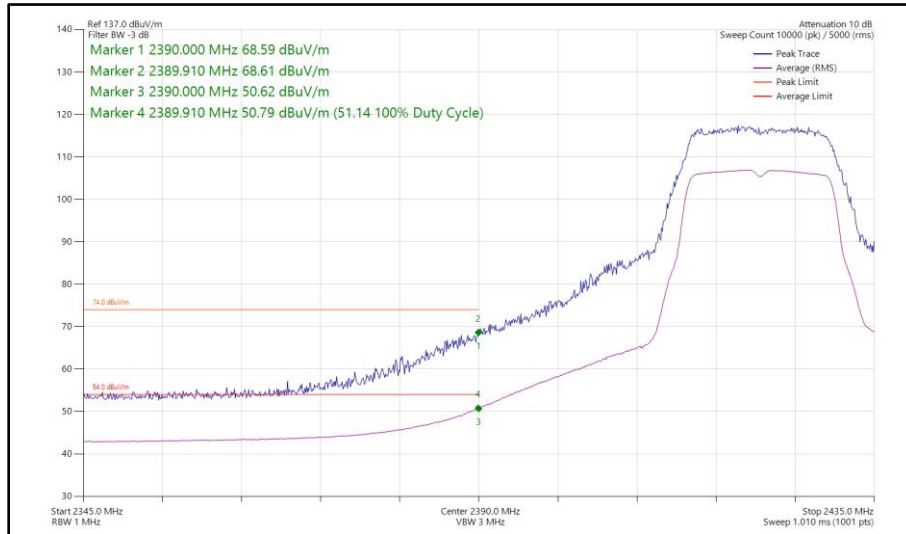


Figure 6 - 802.11g, SISO, Core 0 - 2422 MHz  
Band Edge Frequency 2390 MHz

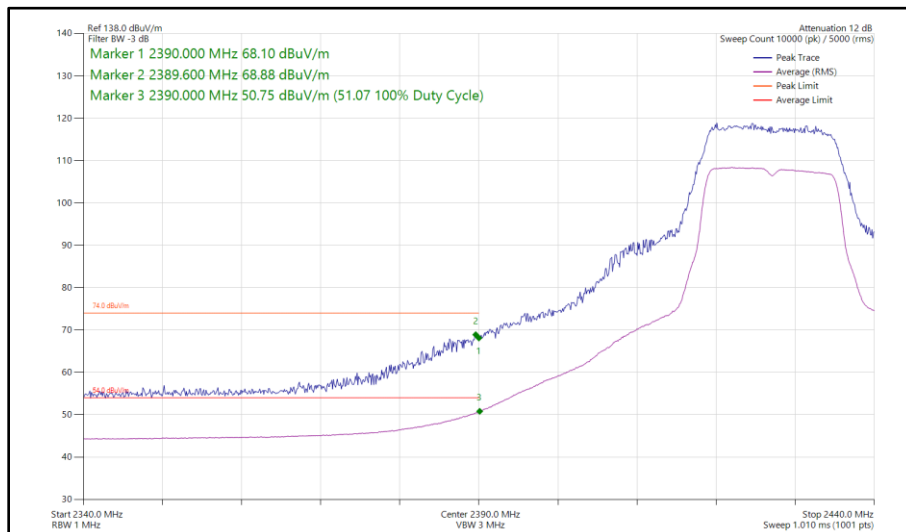


Figure 7 - 802.11g, SISO, Core 0 - 2427 MHz  
Band Edge Frequency 2390 MHz

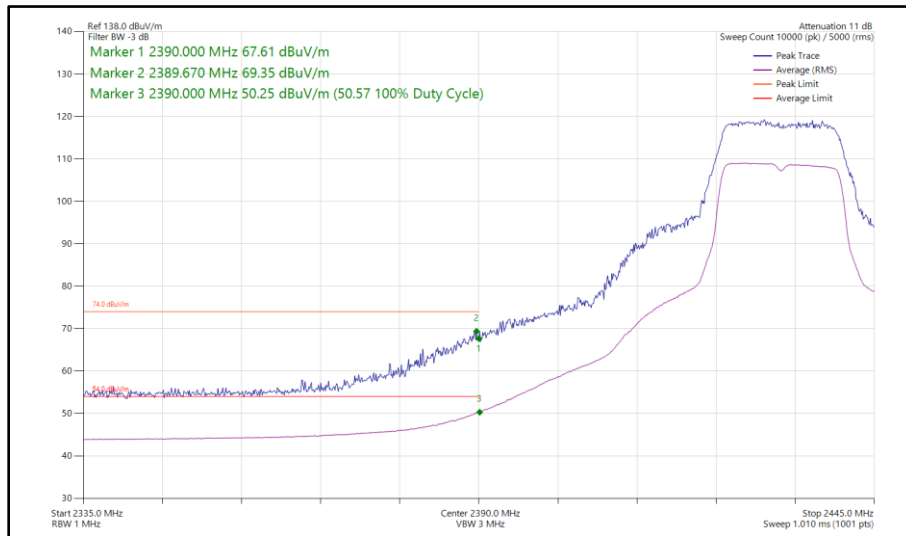


Figure 8 - 802.11g, SISO, Core 0 - 2432 MHz  
Band Edge Frequency 2390 MHz

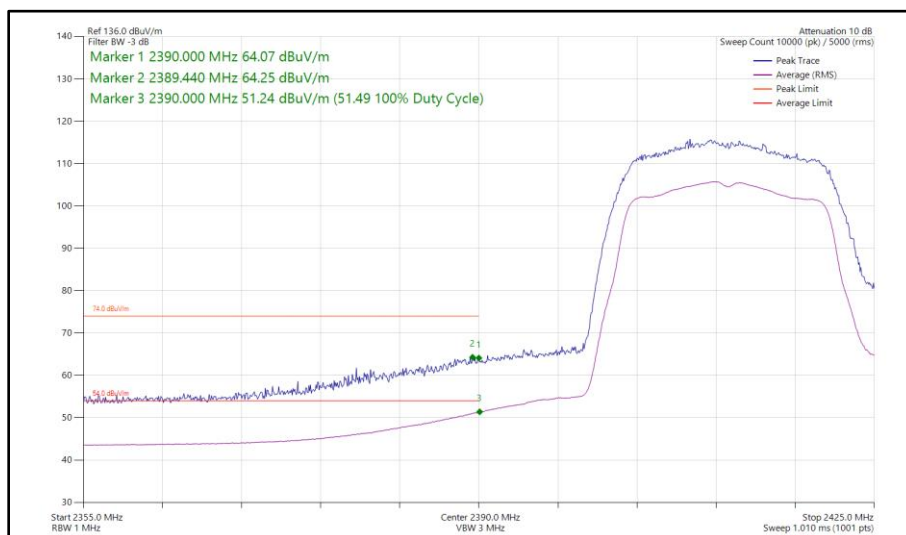


Figure 9 - 802.11n HT20, SISO, Core 0 - 2412 MHz  
Band Edge Frequency 2390 MHz

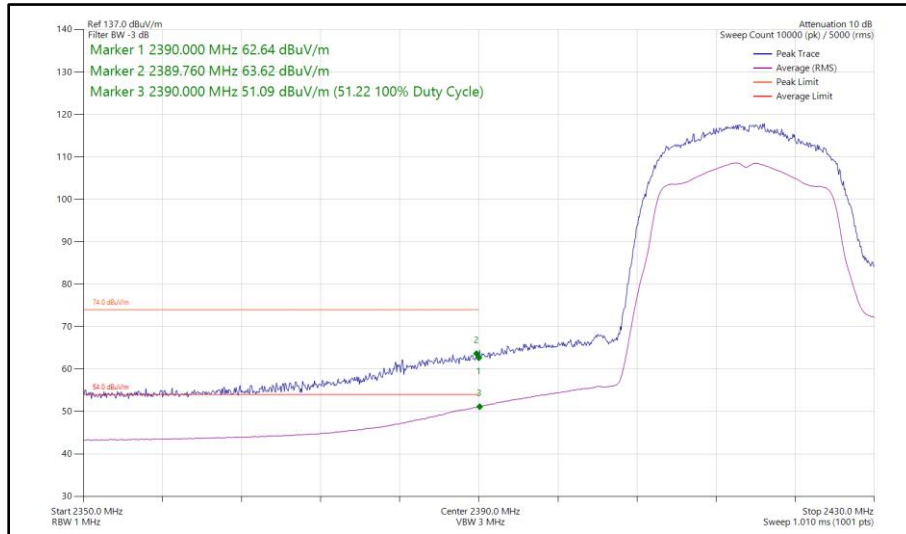


Figure 10 - 802.11n HT20, SISO, Core 0 - 2417 MHz  
Band Edge Frequency 2390 MHz

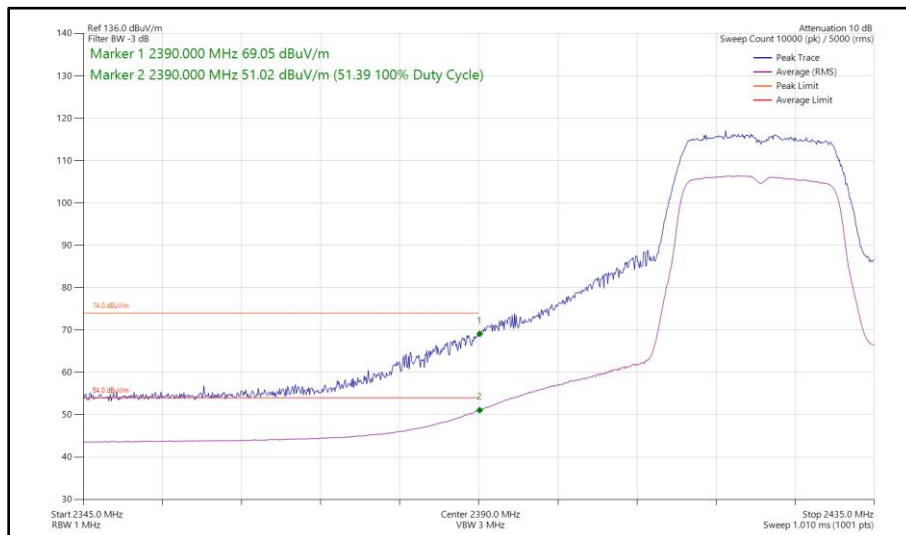


Figure 11 - 802.11n HT20, SISO, Core 0 - 2422 MHz  
Band Edge Frequency 2390 MHz

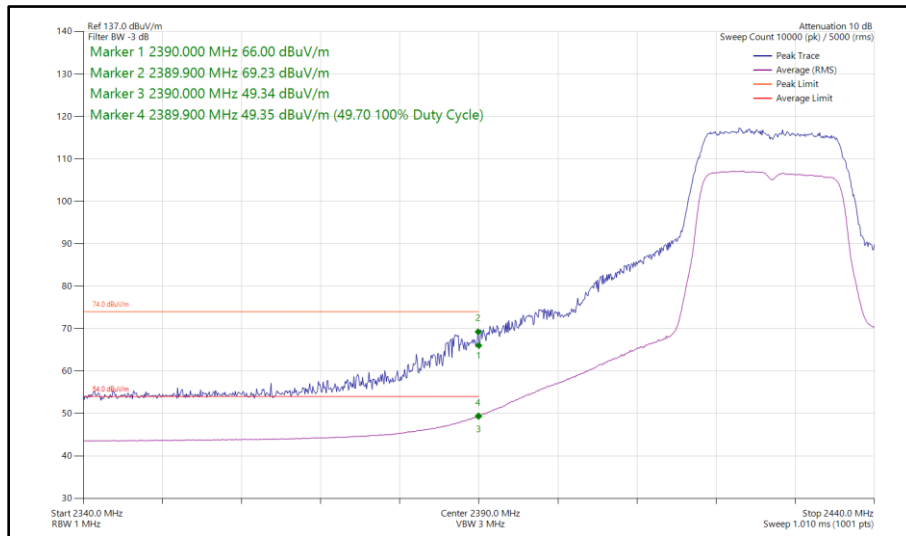


Figure 12 - 802.11n HT20, SISO, Core 0 - 2427 MHz  
Band Edge Frequency 2390 MHz

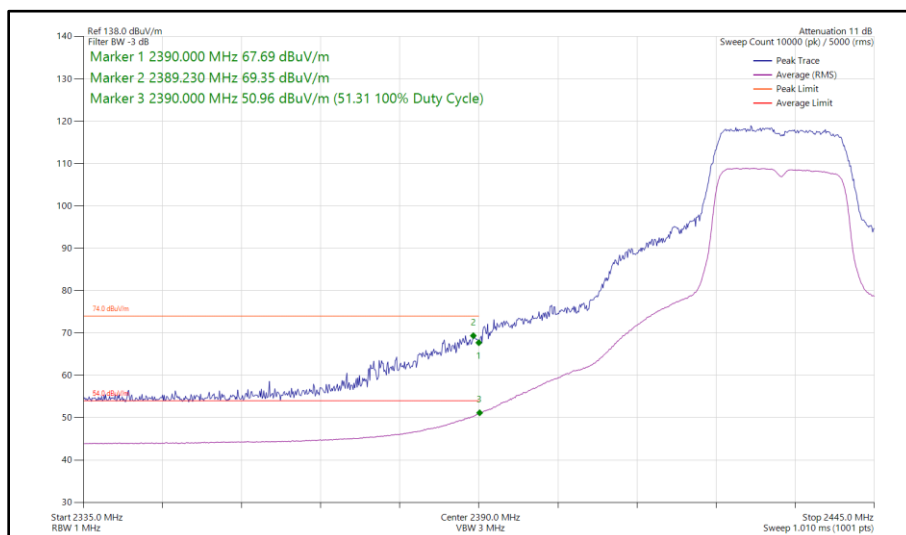


Figure 13 - 802.11n HT20, SISO, Core 0 - 2432 MHz  
Band Edge Frequency 2390 MHz



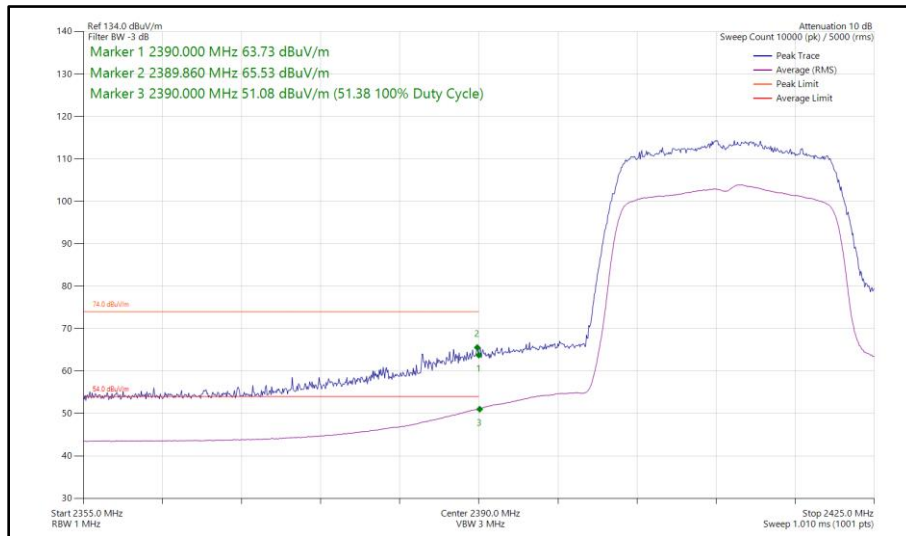


Figure 14 - 802.11ax HE20, SU, SISO, Core 0 - 2412 MHz  
Band Edge Frequency 2390 MHz

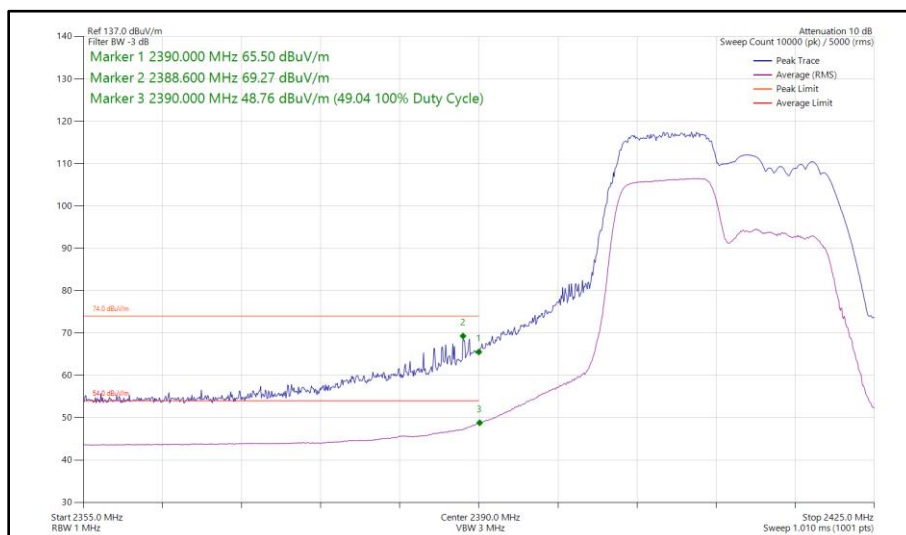


Figure 15 - 802.11ax HE20, RU 106-53, SISO, Core 0 - 2412 MHz  
Band Edge Frequency 2390 MHz

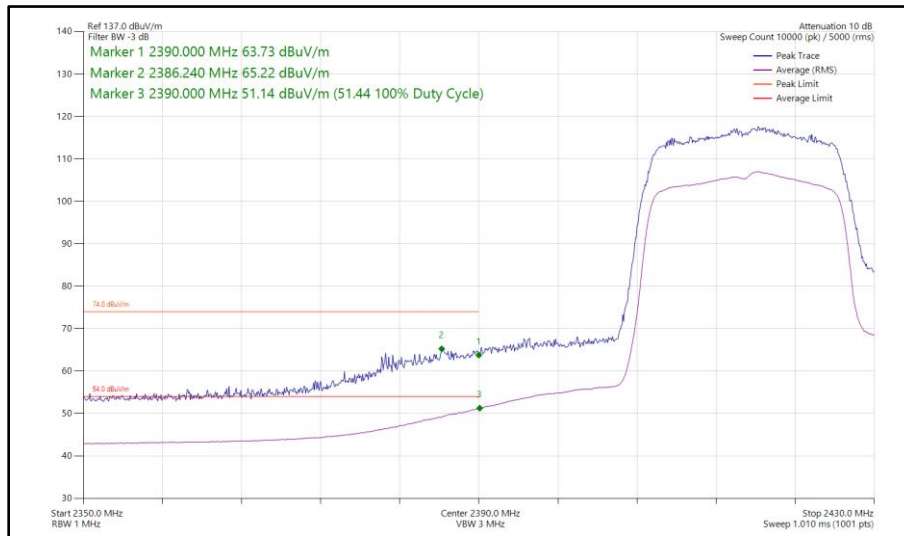


Figure 16 - 802.11ax HE20, SU, SISO, Core 0 - 2417 MHz  
Band Edge Frequency 2390 MHz

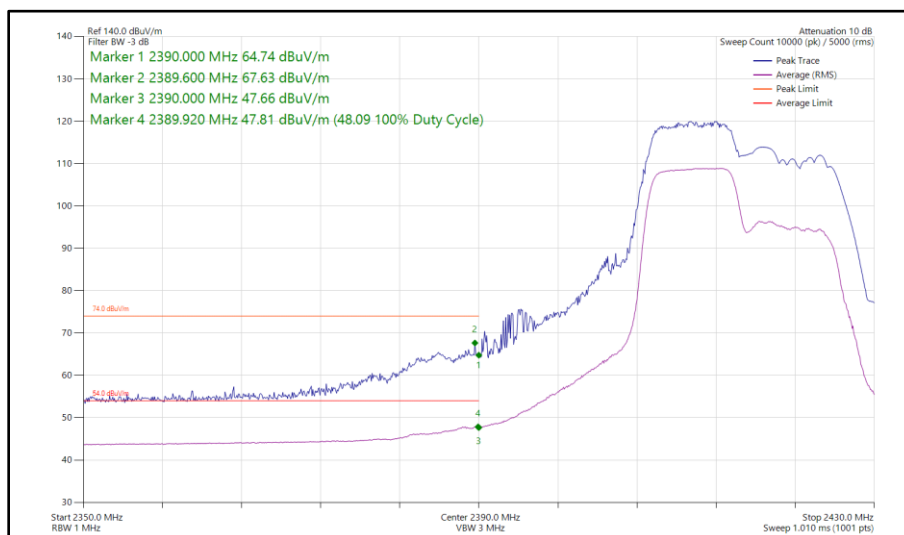
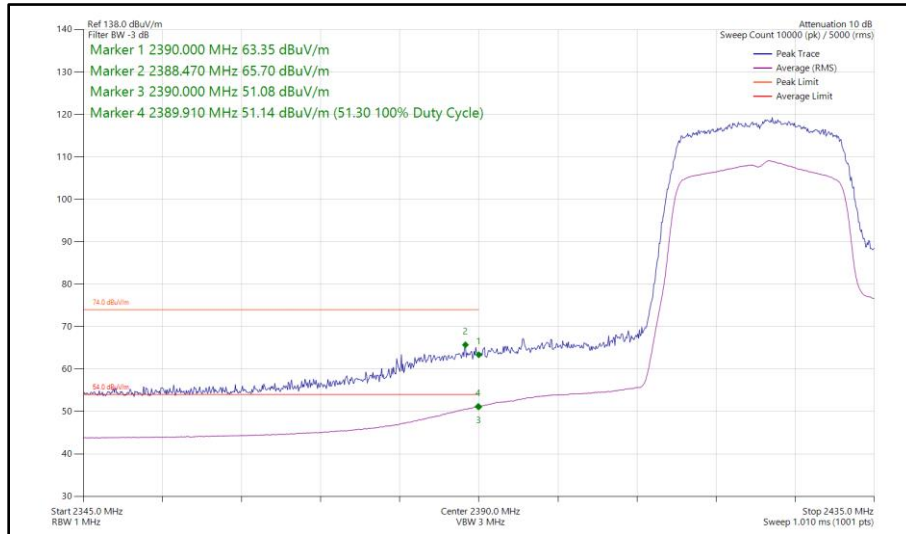
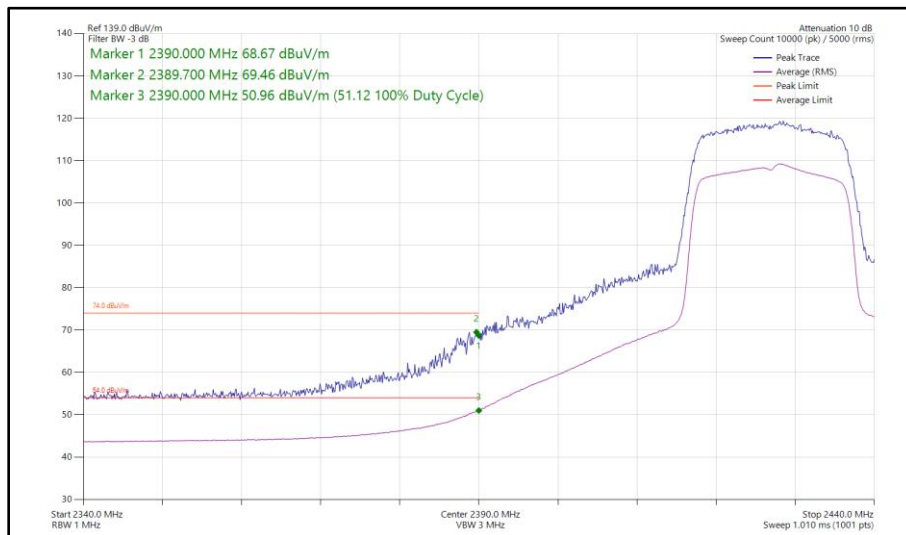


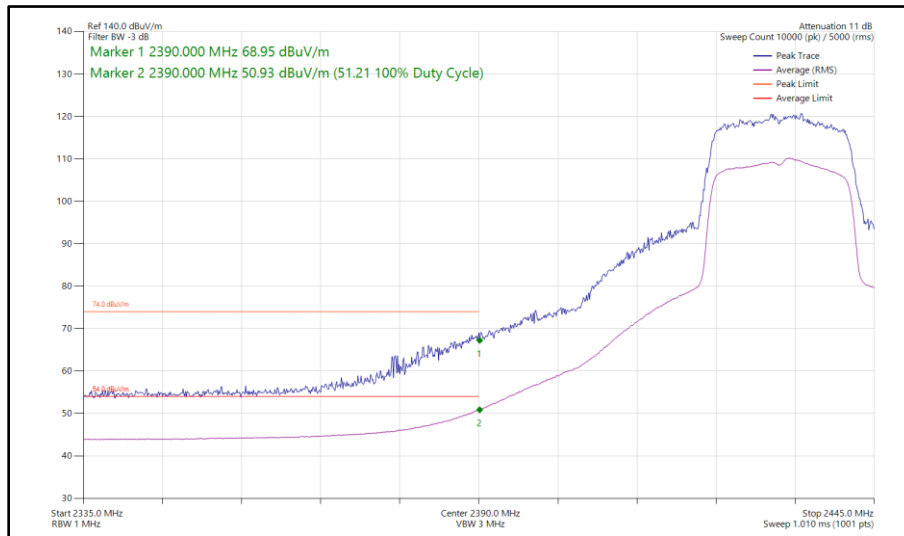
Figure 17 - 802.11ax HE20, RU 106-53, SISO, Core 0 - 2417 MHz  
Band Edge Frequency 2390 MHz



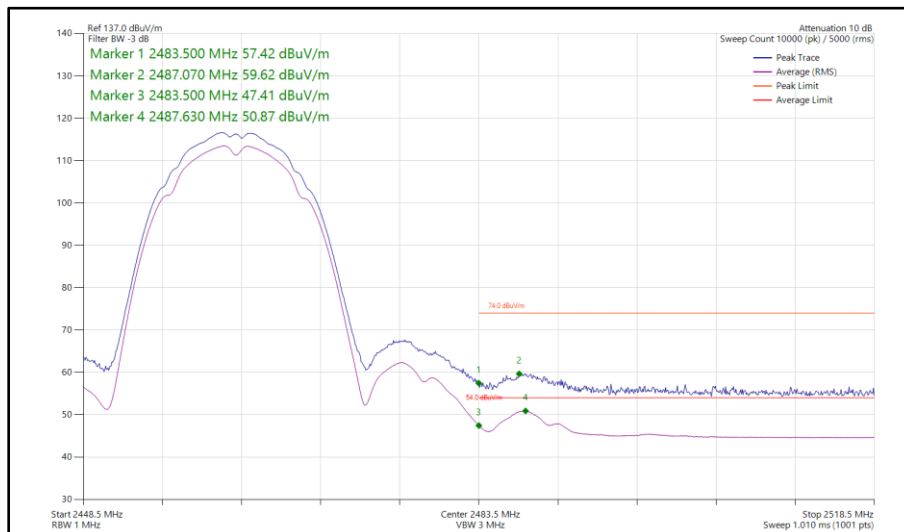
**Figure 18 - 802.11ax HE20, SU, SISO, Core 0 - 2422 MHz  
Band Edge Frequency 2390 MHz**



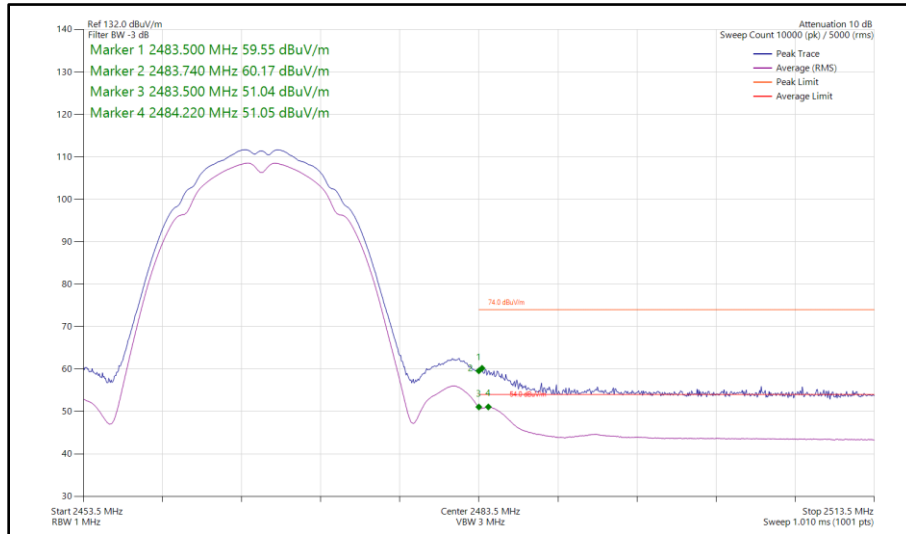
**Figure 19 - 802.11ax HE20, SU, SISO, Core 0 - 2427 MHz  
Band Edge Frequency 2390 MHz**



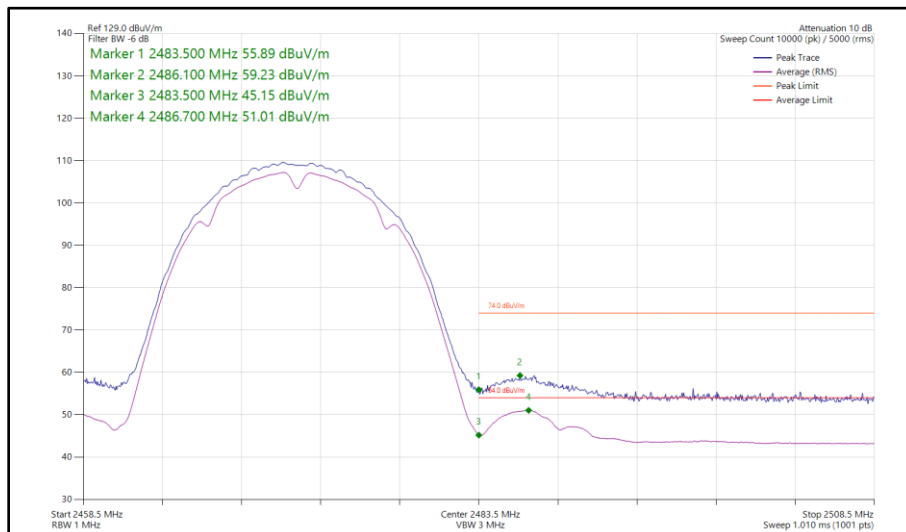
**Figure 20 - 802.11ax HE20, SU, SISO, Core 0 - 2432 MHz  
 Band Edge Frequency 2390 MHz**



**Figure 21 - 802.11b, SISO, Core 0 - 2462 MHz  
 Band Edge Frequency 2483.5 MHz**



**Figure 22 - 802.11b, SISO, Core 0 - 2467 MHz  
Band Edge Frequency 2483.5 MHz**



**Figure 23 - 802.11b, SISO, Core 0 - 2472 MHz  
Band Edge Frequency 2483.5 MHz**

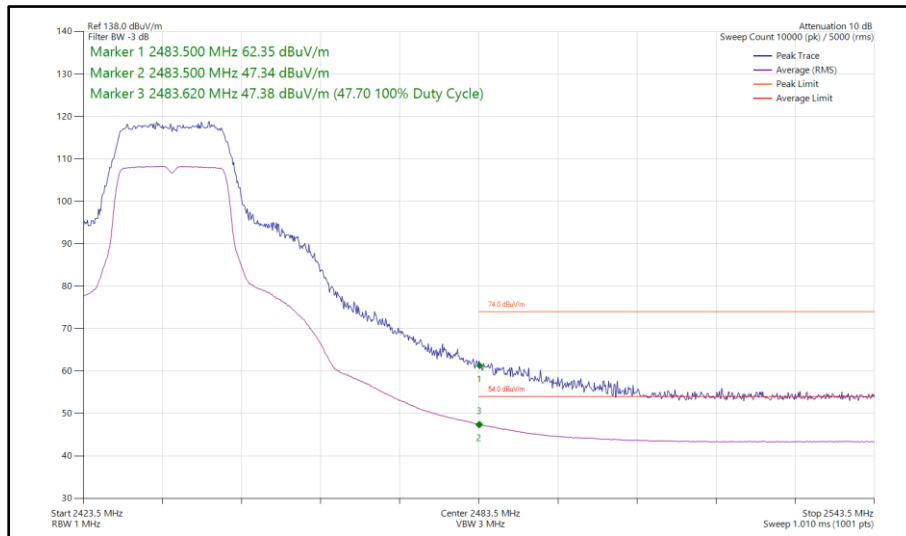


Figure 24 - 802.11g, SISO, Core 0 - 2437 MHz  
Band Edge Frequency 2483.5 MHz

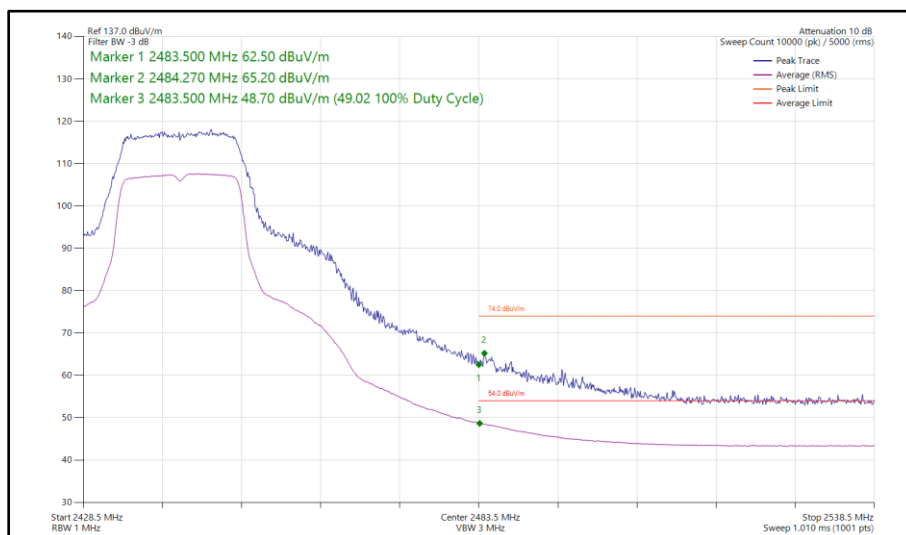


Figure 25 - 802.11g, SISO, Core 0 - 2442 MHz  
Band Edge Frequency 2483.5 MHz

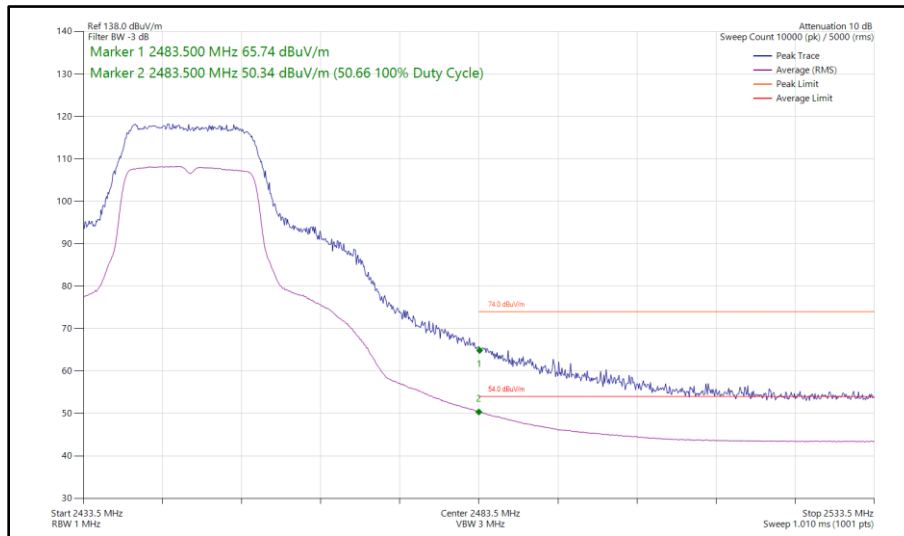


Figure 26 - 802.11g, SISO, Core 0 - 2447 MHz  
Band Edge Frequency 2483.5 MHz

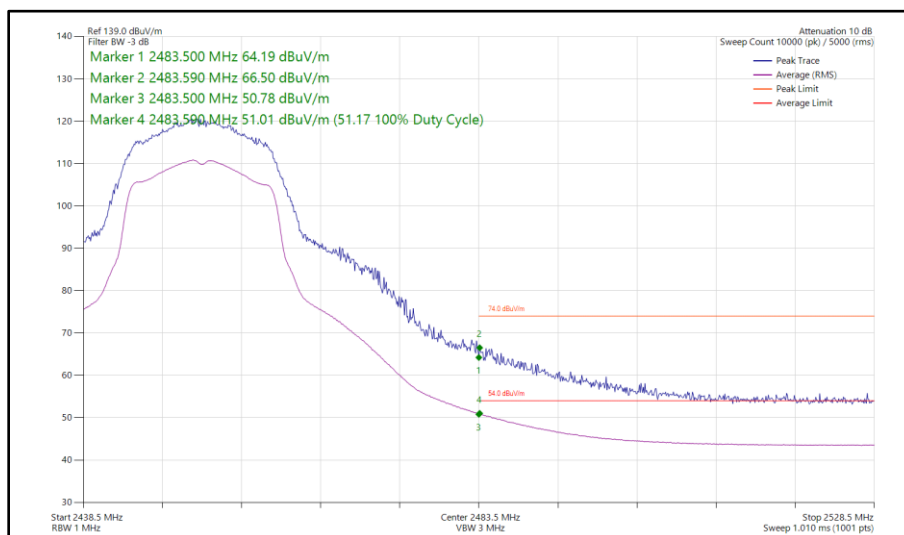


Figure 27 - 802.11g, SISO, Core 0 - 2452 MHz  
Band Edge Frequency 2483.5 MHz

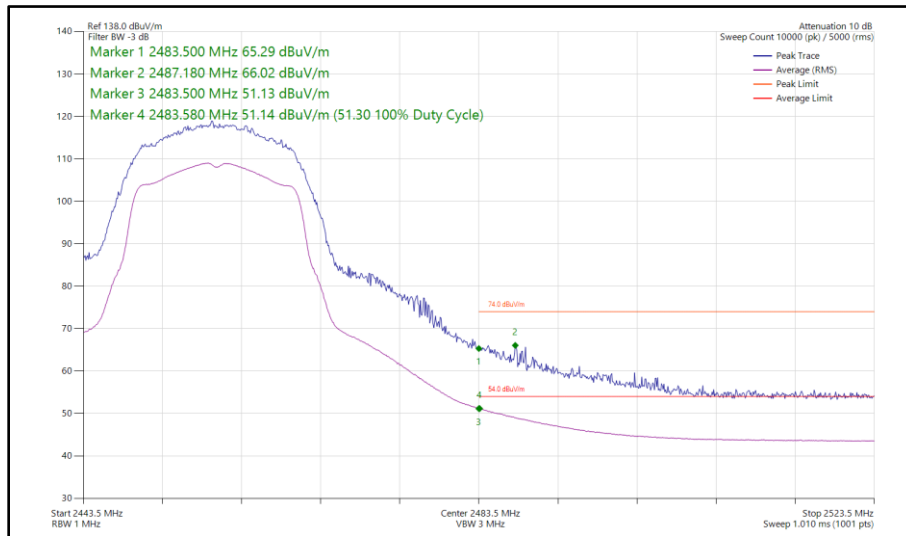


Figure 28 - 802.11g, SISO, Core 0 - 2457 MHz  
Band Edge Frequency 2483.5 MHz

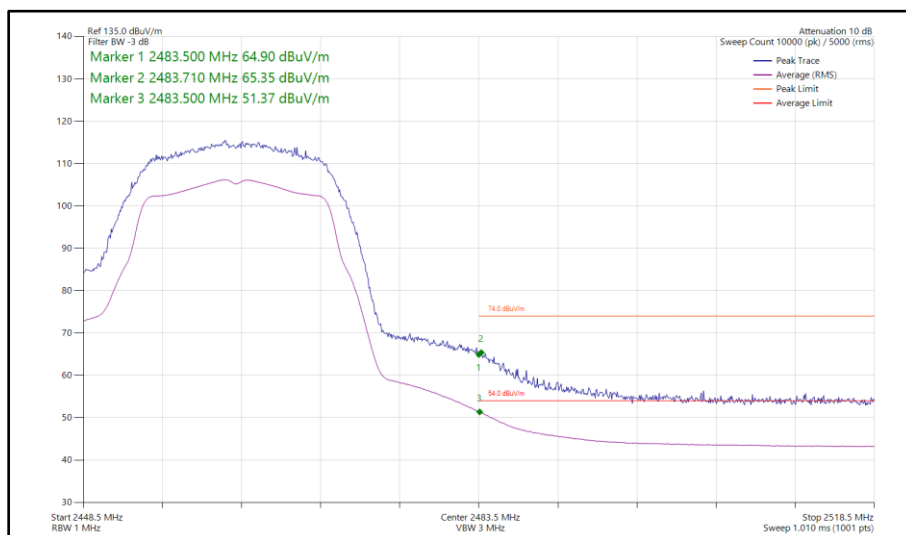


Figure 29 - 802.11g, SISO, Core 0 - 2462 MHz  
Band Edge Frequency 2483.5 MHz



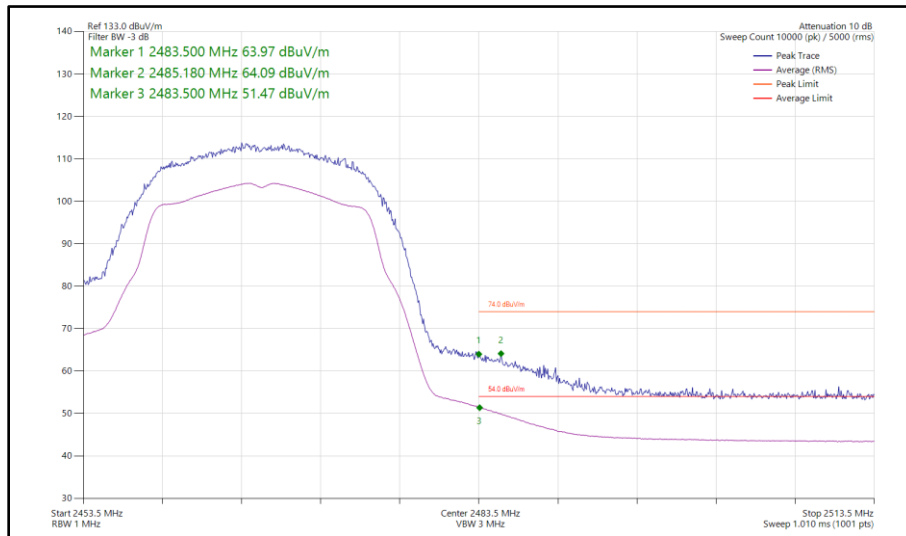


Figure 30 - 802.11g, SISO, Core 0 - 2467 MHz  
Band Edge Frequency 2483.5 MHz

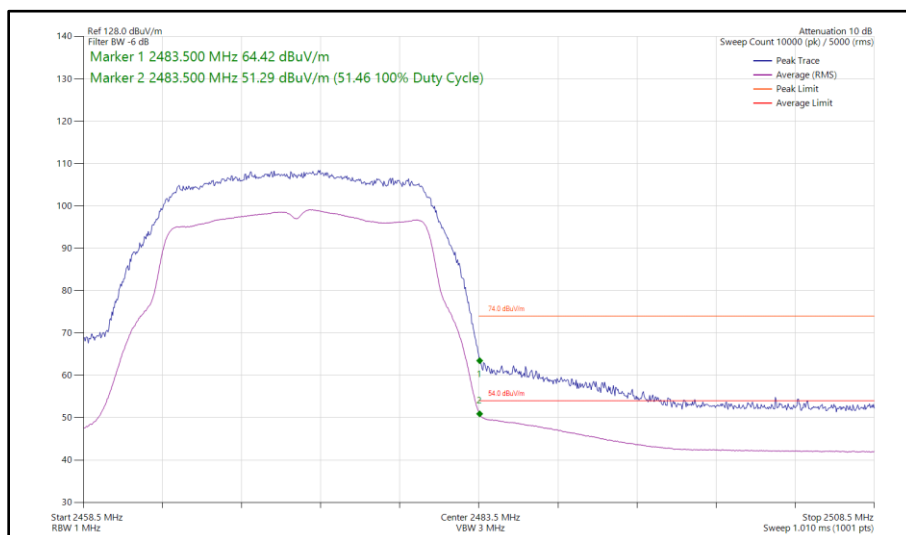
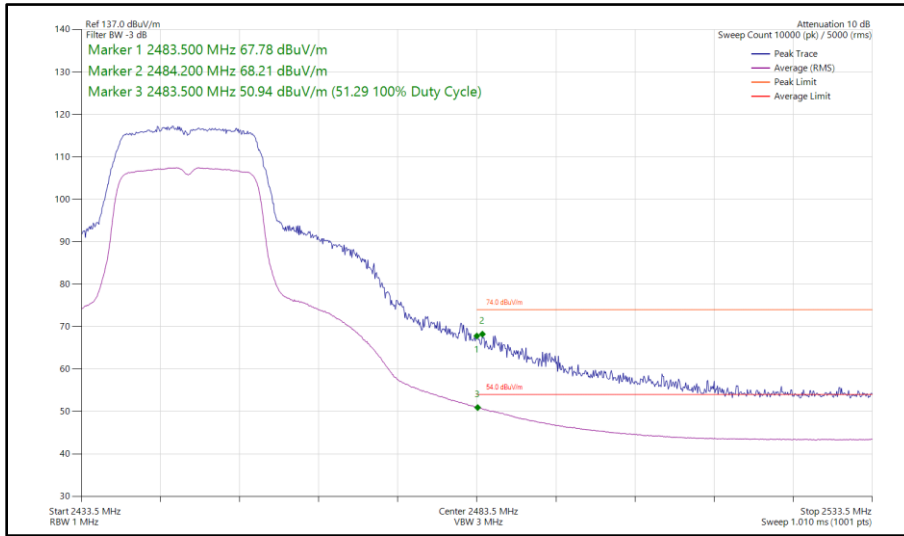
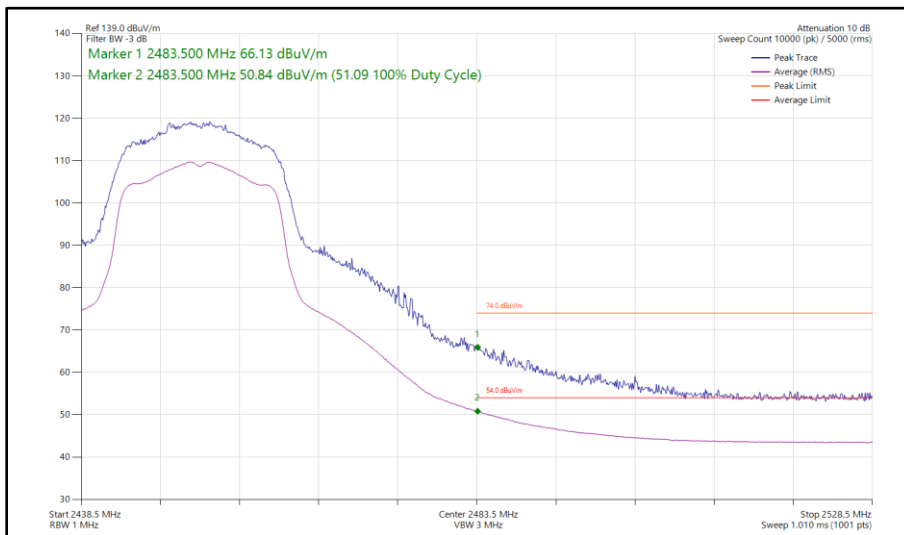


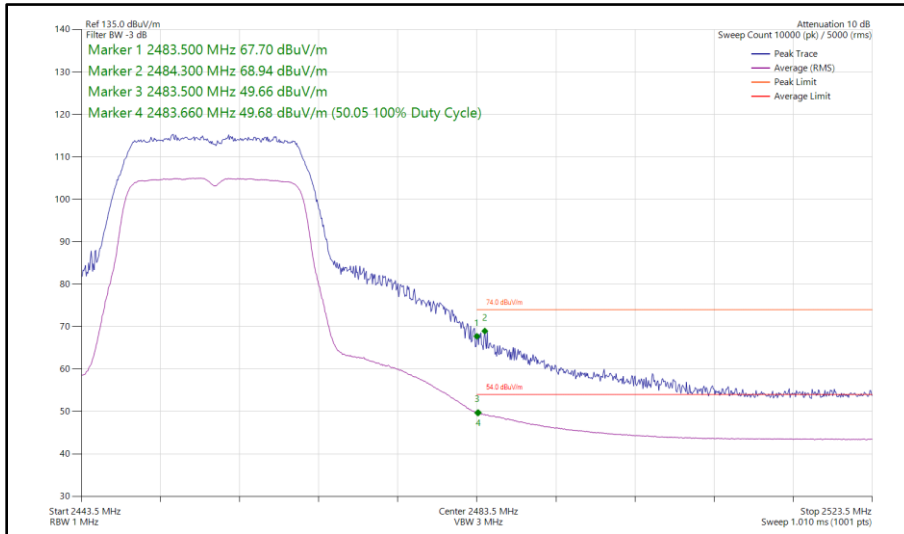
Figure 31 - 802.11g, SISO, Core 0 - 2472 MHz  
Band Edge Frequency 2483.5 MHz



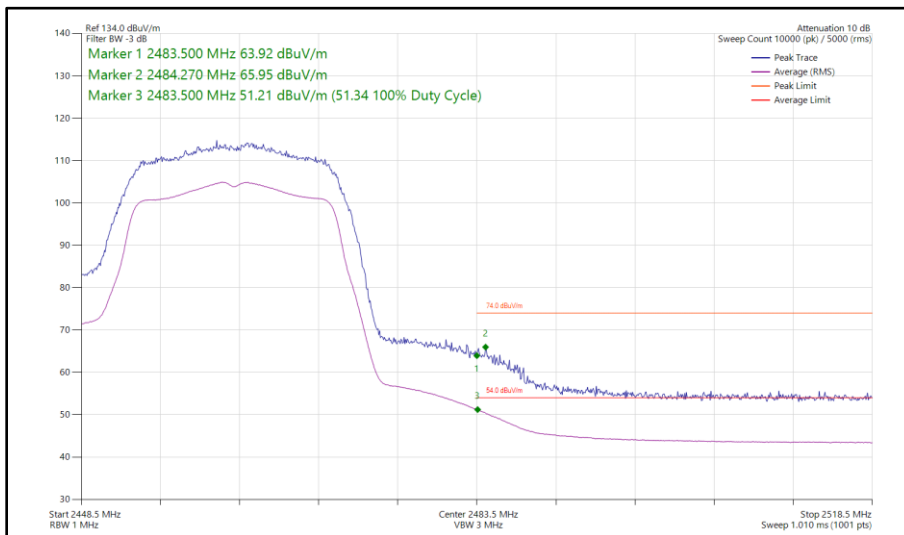
**Figure 32 - 802.11n HT20, SISO, Core 0 - 2447 MHz  
Band Edge Frequency 2483.5 MHz**



**Figure 33 - 802.11n HT20, SISO, Core 0 - 2452 MHz  
Band Edge Frequency 2483.5 MHz**



**Figure 34 - 802.11n HT20, SISO, Core 0 - 2457 MHz  
Band Edge Frequency 2483.5 MHz**



**Figure 35 - 802.11n HT20, SISO, Core 0 - 2462 MHz  
Band Edge Frequency 2483.5 MHz**

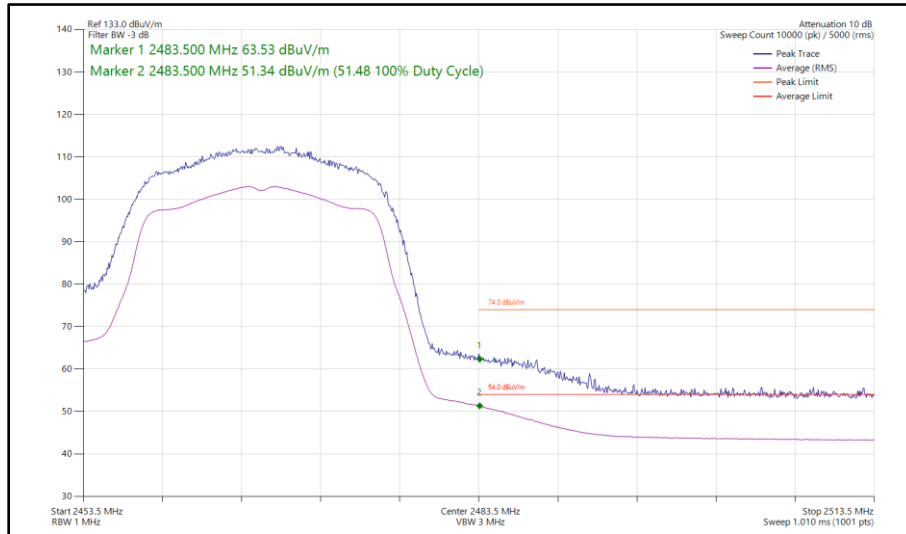


Figure 36 - 802.11n HT20, SISO, Core 0 - 2467 MHz  
Band Edge Frequency 2483.5 MHz

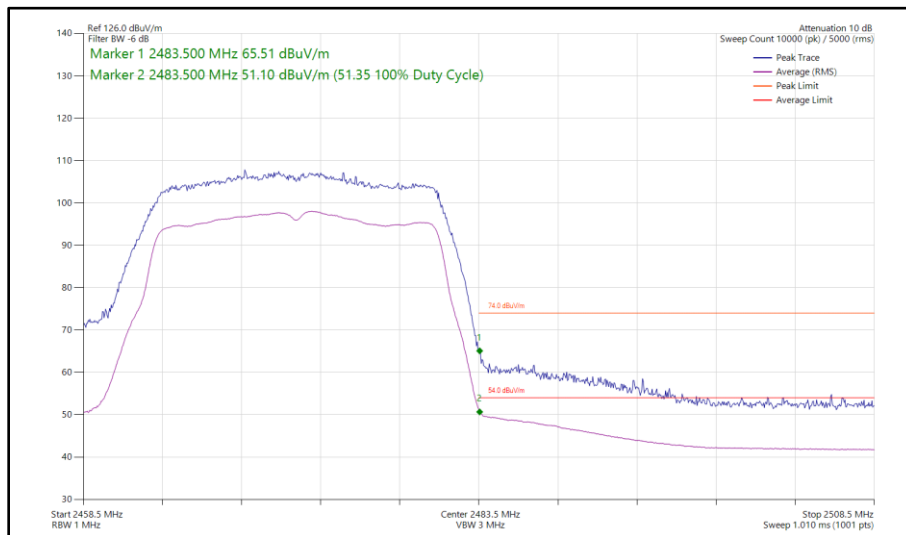
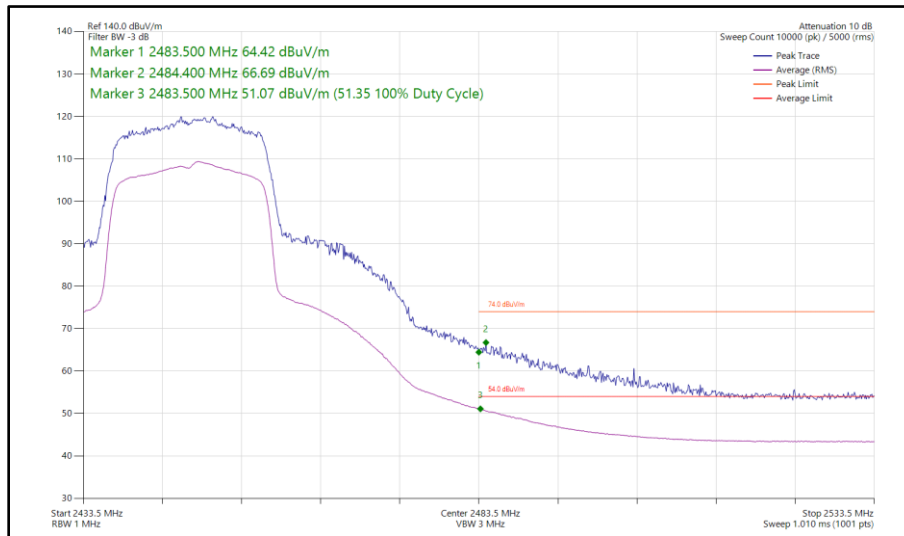
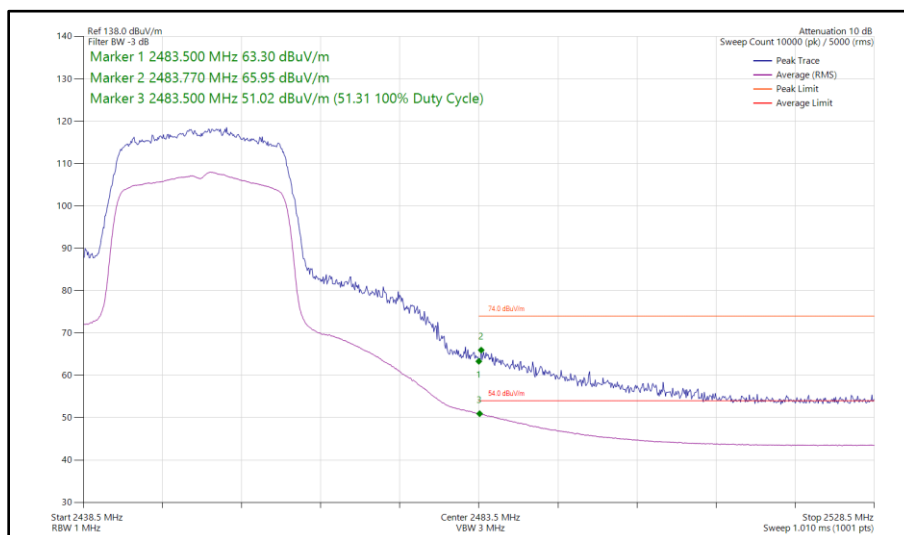


Figure 37 - 802.11n HT20, SISO, Core 0 - 2472 MHz  
Band Edge Frequency 2483.5 MHz



**Figure 38 - 802.11ax HE20, SU, SISO, Core 0 - 2447 MHz  
Band Edge Frequency 2483.5 MHz**



**Figure 39 - 802.11ax HE20, SU, SISO, Core 0 - 2452 MHz  
Band Edge Frequency 2483.5 MHz**

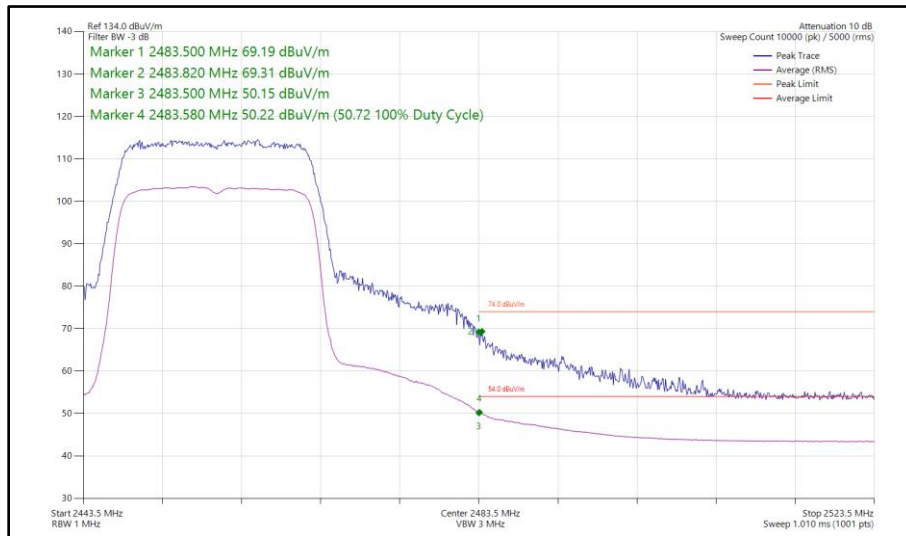


Figure 40 - 802.11ax HE20, SU, SISO, Core 0 - 2457 MHz  
Band Edge Frequency 2483.5 MHz

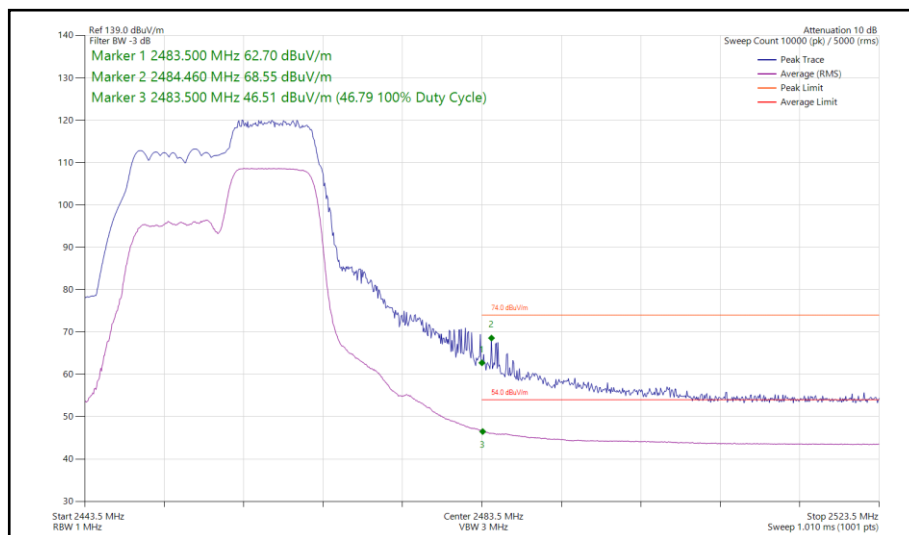


Figure 41 - 802.11ax HE20, RU 106-54, SISO, Core 0 - 2457 MHz  
Band Edge Frequency 2483.5 MHz

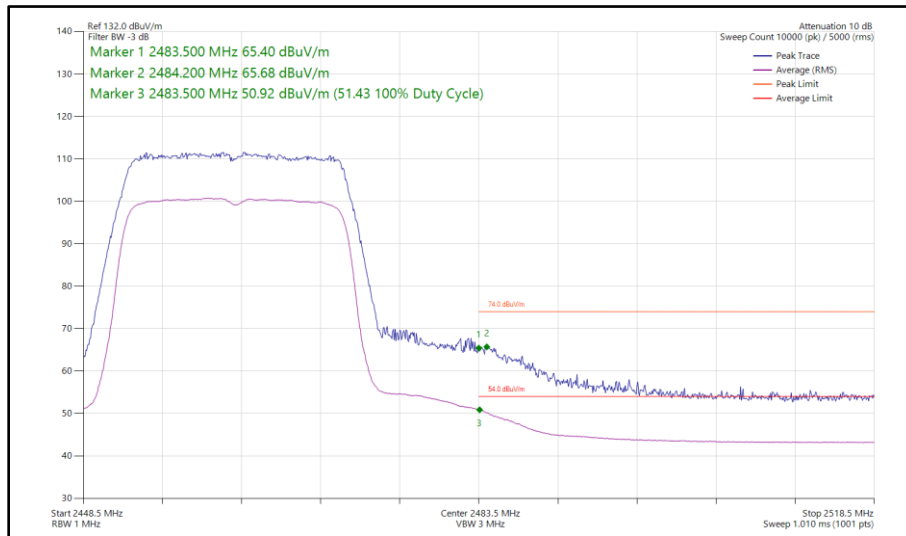


Figure 42 - 802.11ax HE20, SU, SISO, Core 0 - 2462 MHz  
Band Edge Frequency 2483.5 MHz

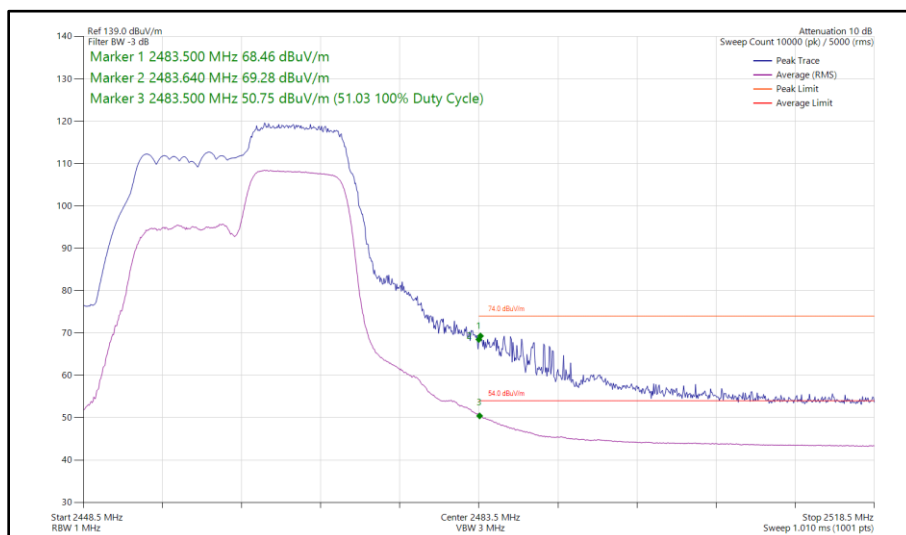


Figure 43 - 802.11ax HE20, RU 106-54, SISO, Core 0 - 2462 MHz  
Band Edge Frequency 2483.5 MHz

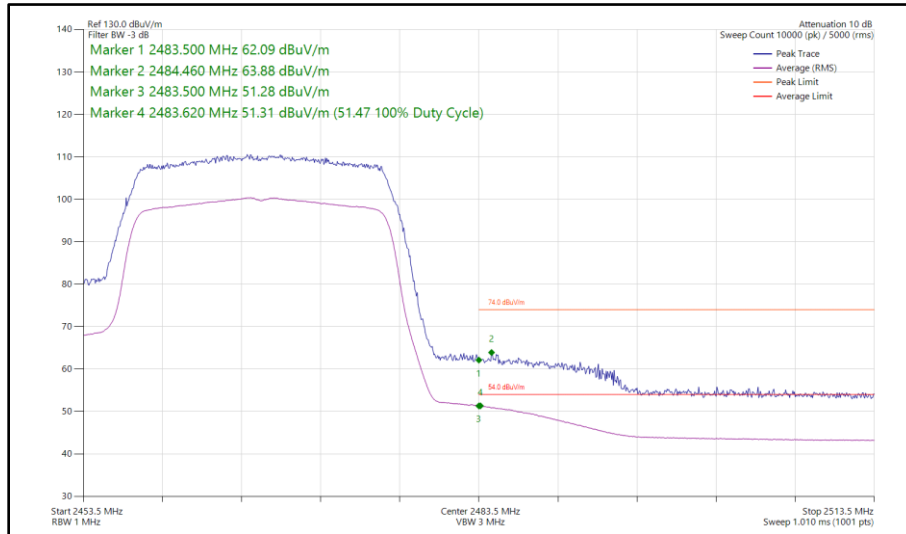


Figure 44 - 802.11ax HE20, SU, SISO, Core 0 - 2467 MHz  
Band Edge Frequency 2483.5 MHz

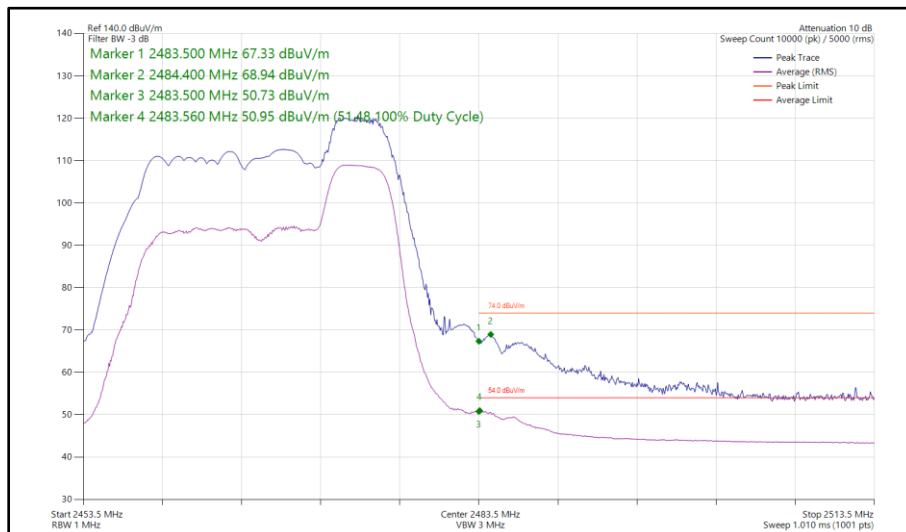
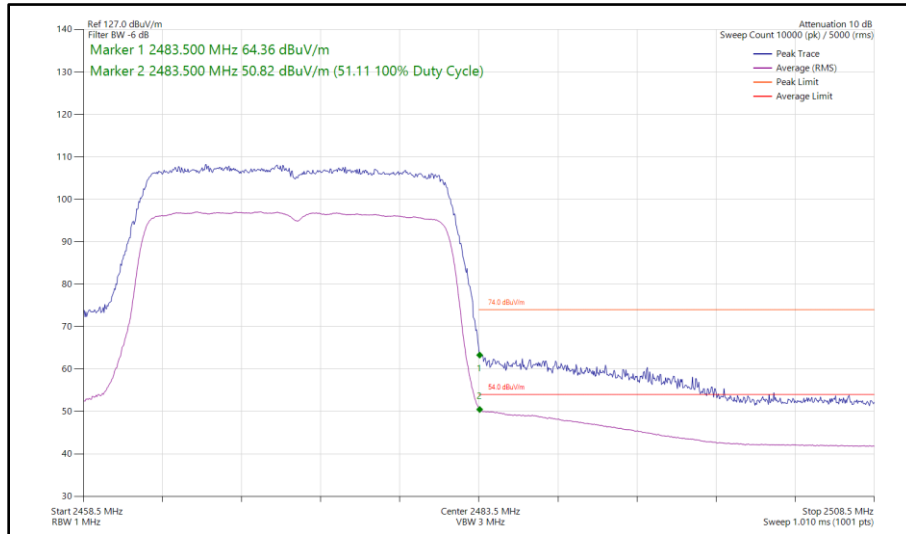
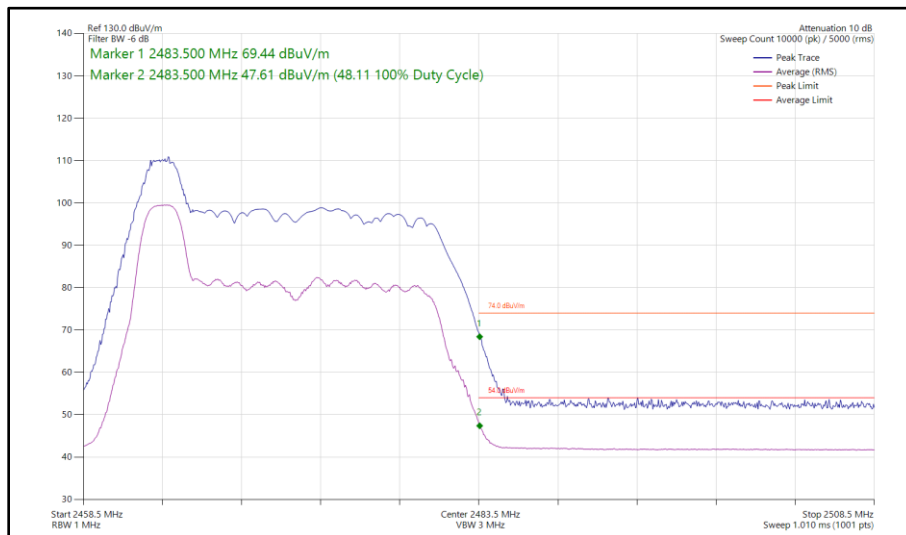


Figure 45 - 802.11ax HE20, RU 52-40, SISO, Core 0 - 2467 MHz  
Band Edge Frequency 2483.5 MHz





**Figure 46 - 802.11ax HE20, SU, SISO, Core 0 - 2472 MHz  
Band Edge Frequency 2483.5 MHz**



**Figure 47 - 802.11ax HE20, RU 26-0, SISO, Core 0 - 2472 MHz  
Band Edge Frequency 2483.5 MHz**



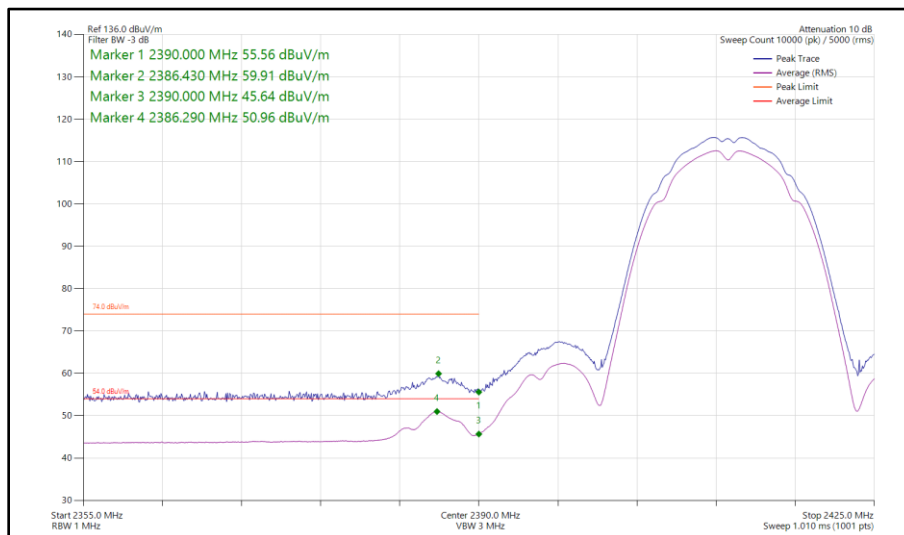
20 MHz Bandwidth - Core 1 (SISO)

Mode	Data Rate/ MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dB $\mu$ V/m)	Average Level (dB $\mu$ V/m)
802.11b	1 Mbps	-	-	2412	2390	59.91	50.96
802.11b	1 Mbps	-	-	2417	2390	58.67	49.65
802.11g	12 Mbps	-	-	2412	2390	65.99	51.48
802.11g	54 Mbps	-	-	2417	2390	69.36	50.22
802.11g	24 Mbps	-	-	2422	2390	69.33	50.76
802.11g	54 Mbps	-	-	2427	2390	69.06	50.21
802.11g	54 Mbps	-	-	2432	2390	69.39	51.15
802.11n HT20	MCS 4	-	-	2412	2390	65.65	51.41
802.11n HT20	MCS 2	-	-	2417	2390	64.22	51.38
802.11n HT20	MCS 7	-	-	2422	2390	68.09	50.96
802.11n HT20	MCS 7	-	-	2427	2390	69.30	50.35
802.11n HT20	MCS 7	-	-	2432	2390	69.46	50.07
802.11ax HE20	MCS 9x1	SU	-	2412	2390	65.01	51.28
802.11ax HE20	MCS 9x1	106	54	2412	2390	69.45	48.79
802.11ax HE20	MCS 9x1	SU	-	2417	2390	69.36	50.86
802.11ax HE20	MCS 9x1	106	53	2417	2390	67.04	46.23
802.11ax HE20	MCS 2x1	SU	-	2422	2390	65.56	51.33
802.11ax HE20	MCS 9x1	SU	-	2427	2390	69.36	50.53
802.11ax HE20	MCS 4x1	SU	-	2432	2390	68.35	51.18
802.11b	1 Mbps	-	-	2462	2483.5	59.46	51.20
802.11b	1 Mbps	-	-	2467	2483.5	60.25	51.48
802.11b	1 Mbps	-	-	2472	2483.5	58.88	51.38
802.11g	54 Mbps	-	-	2437	2483.5	63.29	48.25
802.11g	54 Mbps	-	-	2442	2483.5	66.04	49.73
802.11g	54 Mbps	-	-	2447	2483.5	69.21	51.50
802.11g	54 Mbps	-	-	2452	2483.5	69.43	51.31
802.11g	24 Mbps	-	-	2457	2483.5	66.48	51.41
802.11g	12 Mbps	-	-	2462	2483.5	65.83	51.41
802.11g	54 Mbps	-	-	2467	2483.5	65.56	51.28
802.11g	54 Mbps	-	-	2472	2483.5	66.21	51.10
802.11n HT20	MCS 7	-	-	2447	2483.5	67.90	51.29
802.11n HT20	MCS 4	-	-	2452	2483.5	68.22	51.42
802.11n HT20	MCS 7	-	-	2457	2483.5	69.50	48.45
802.11n HT20	MCS 4	-	-	2462	2483.5	66.84	51.13
802.11n HT20	MCS 7	-	-	2467	2483.5	67.12	51.49
802.11n HT20	MCS 7	-	-	2472	2483.5	66.15	51.45
802.11ax HE20	MCS 9x1	SU	-	2447	2483.5	69.02	51.17



Mode	Data Rate/MCS	Resource Size	Resource Index	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)
802.11ax HE20	MCS 9x1	SU	-	2452	2483.5	69.39	51.27
802.11ax HE20	MCS 2x1	SU	-	2457	2483.5	67.40	51.28
802.11ax HE20	MCS 9x1	106	54	2457	2483.5	68.43	47.96
802.11ax HE20	MCS 2x1	SU	-	2462	2483.5	65.08	51.28
802.11ax HE20	MCS 9x1	106	54	2462	2483.5	68.34	50.45
802.11ax HE20	MCS 4x1	SU	-	2467	2483.5	65.54	51.24
802.11ax HE20	MCS 9x1	106	53	2467	2483.5	69.00	51.34
802.11ax HE20	MCS 2x1	SU	-	2472	2483.5	66.91	51.43
802.11ax HE20	MCS 9x1	52	40	2472	2483.5	69.46	49.77

**Table 8 - SISO Restricted Band Edge Results**



**Figure 48 - 802.11b, SISO, Core 1 - 2412 MHz  
 Band Edge Frequency 2390 MHz**

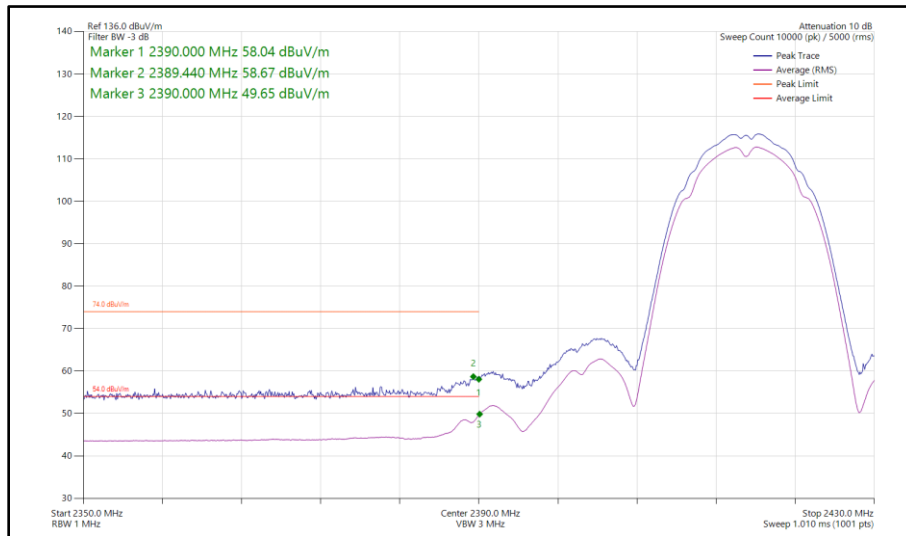


Figure 49 - 802.11b, SISO, Core 1 - 2417 MHz  
Band Edge Frequency 2390 MHz

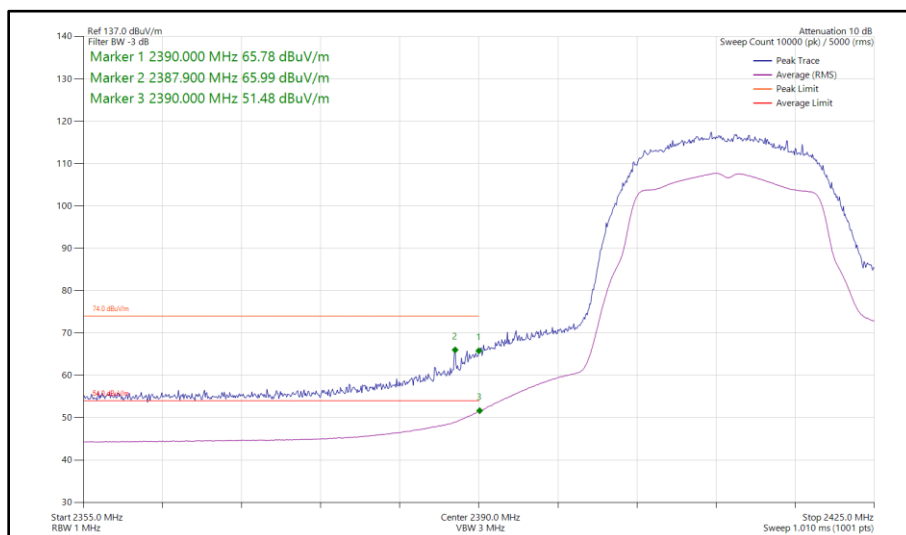


Figure 50 - 802.11g, SISO, Core 1 - 2412 MHz  
Band Edge Frequency 2390 MHz

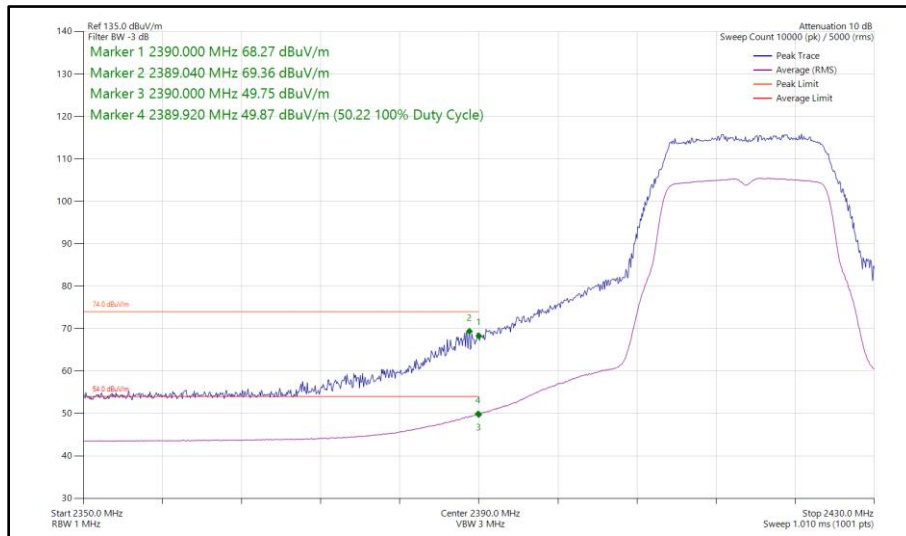


Figure 51 - 802.11g, SISO, Core 1 - 2417 MHz  
Band Edge Frequency 2390 MHz

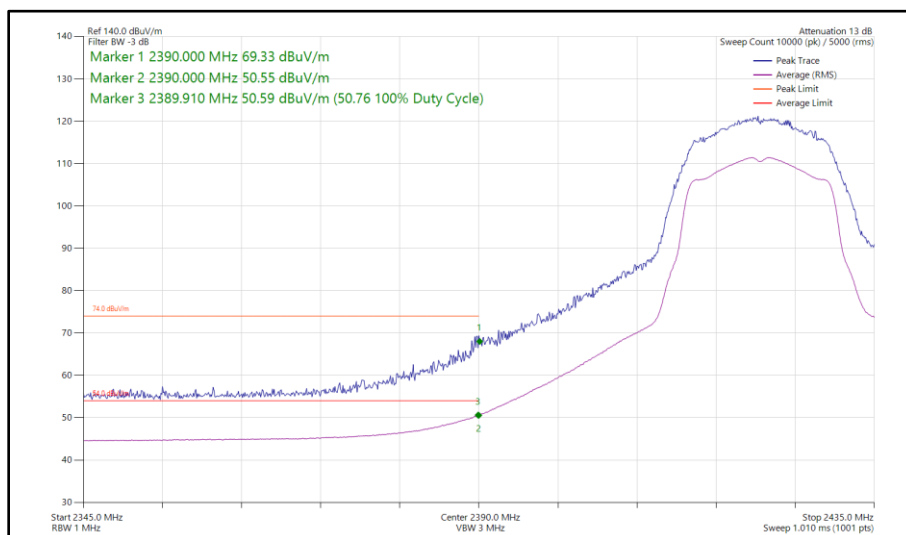


Figure 52 - 802.11g, SISO, Core 1 - 2422 MHz  
Band Edge Frequency 2390 MHz

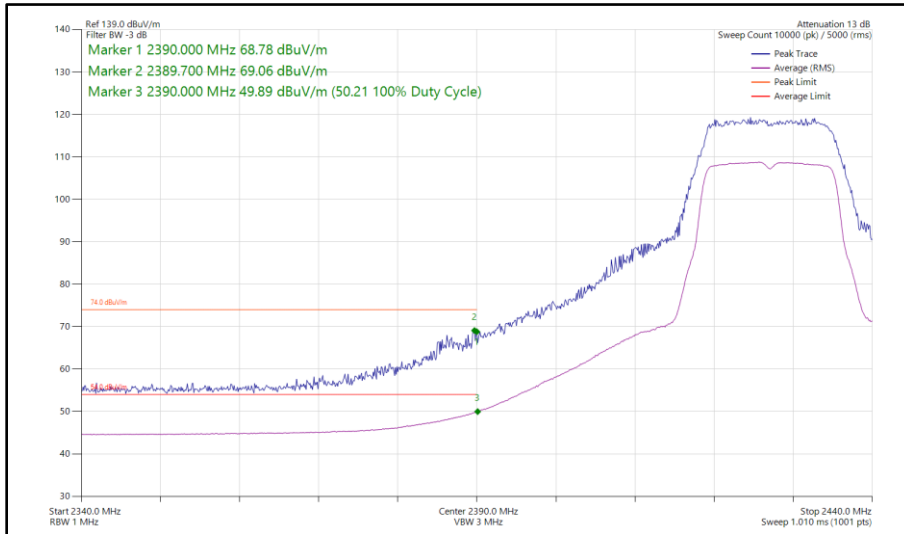


Figure 53 - 802.11g, SISO, Core 1 - 2427 MHz  
Band Edge Frequency 2390 MHz

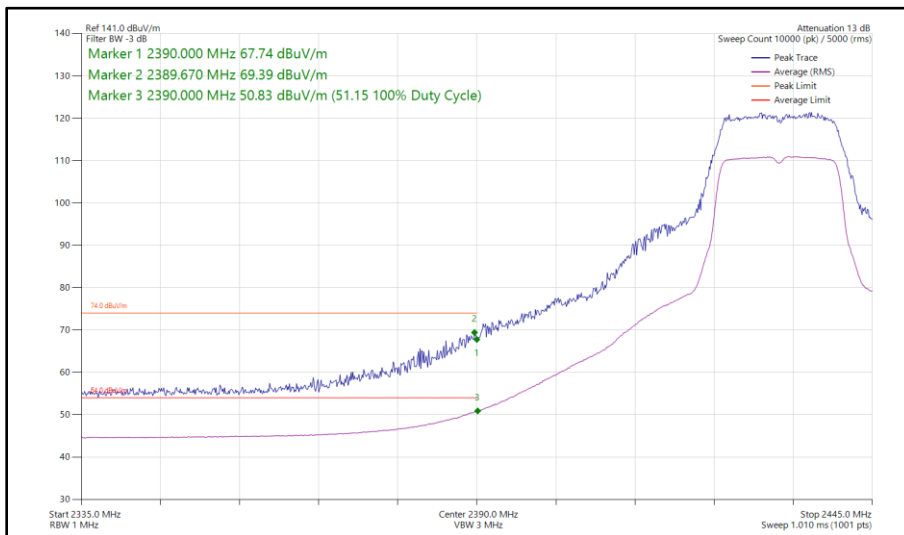


Figure 54 - 802.11g, SISO, Core 1 - 2432 MHz  
Band Edge Frequency 2390 MHz

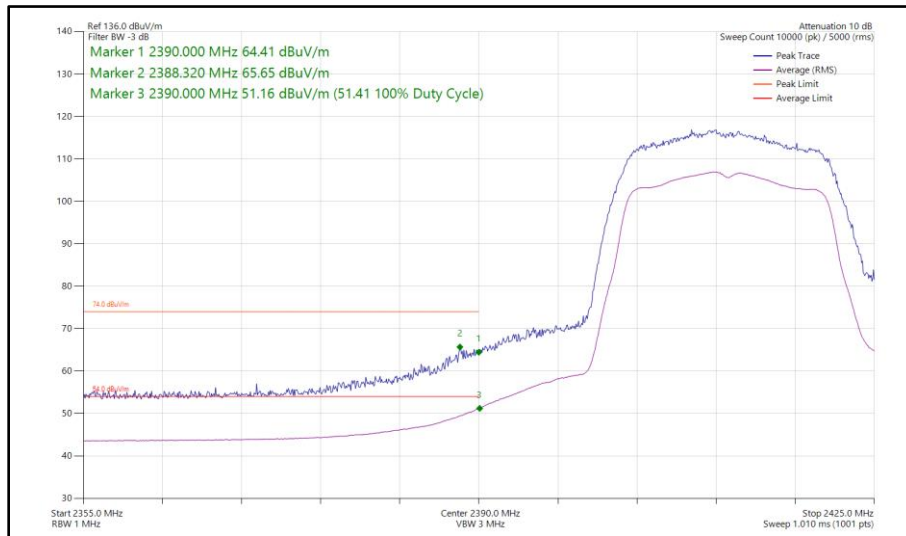


Figure 55 - 802.11n HT20, SISO, Core 1 - 2412 MHz  
Band Edge Frequency 2390 MHz

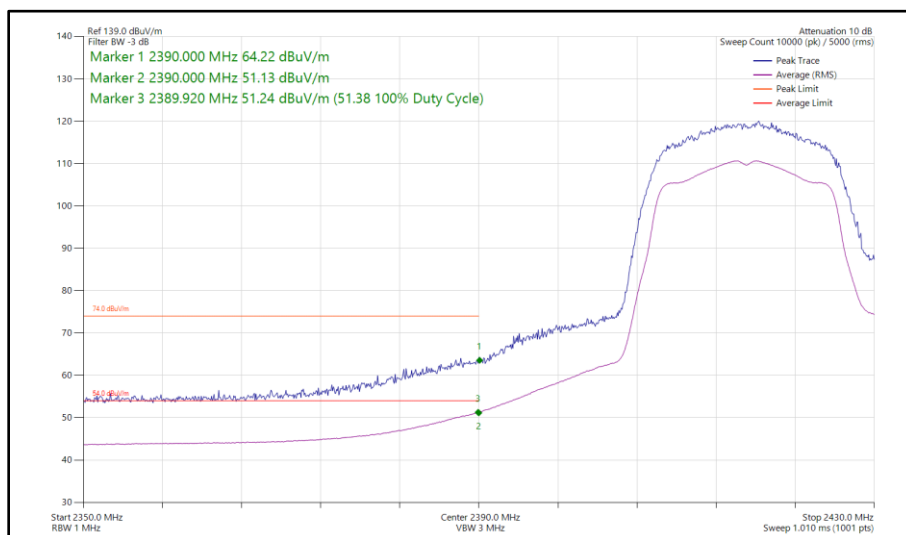


Figure 56 - 802.11n HT20, SISO, Core 1 - 2417 MHz  
Band Edge Frequency 2390 MHz

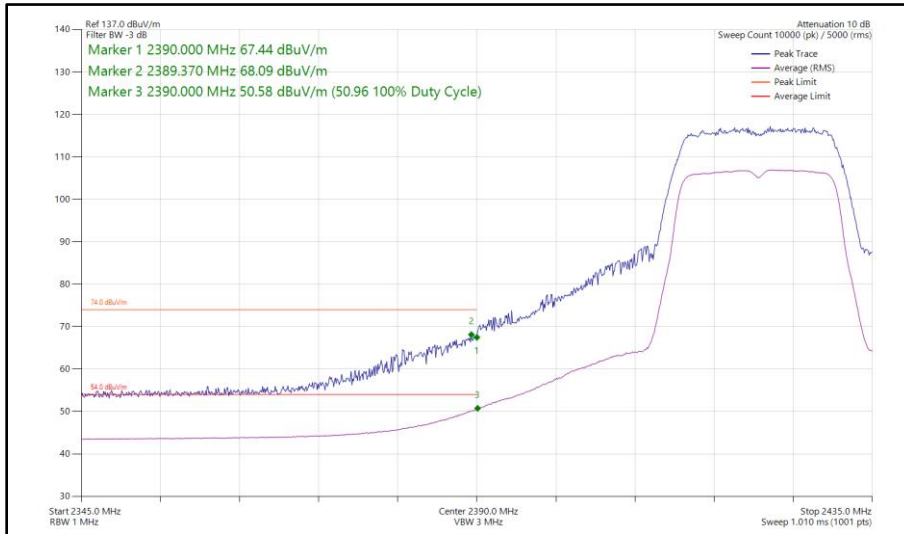


Figure 57 - 802.11n HT20, SISO, Core 1 - 2422 MHz  
Band Edge Frequency 2390 MHz

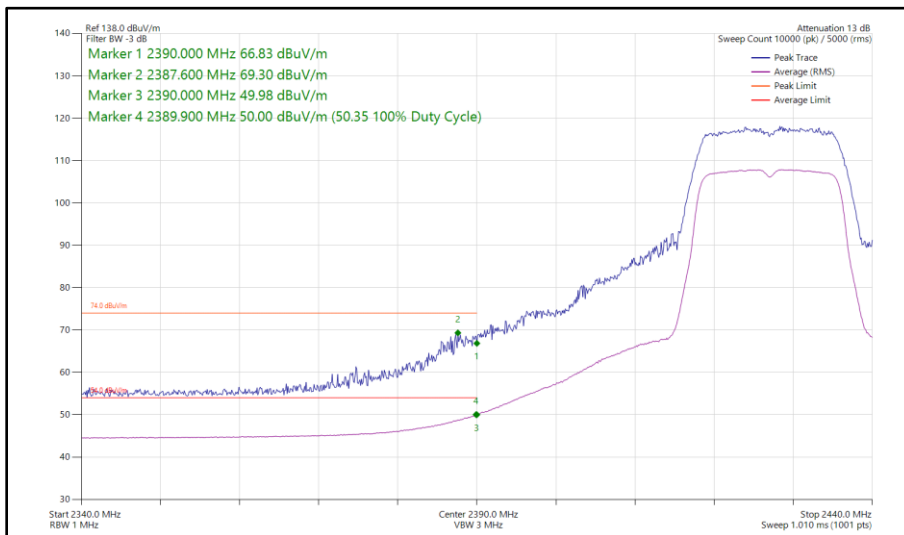


Figure 58 - 802.11n HT20, SISO, Core 1 - 2427 MHz  
Band Edge Frequency 2390 MHz



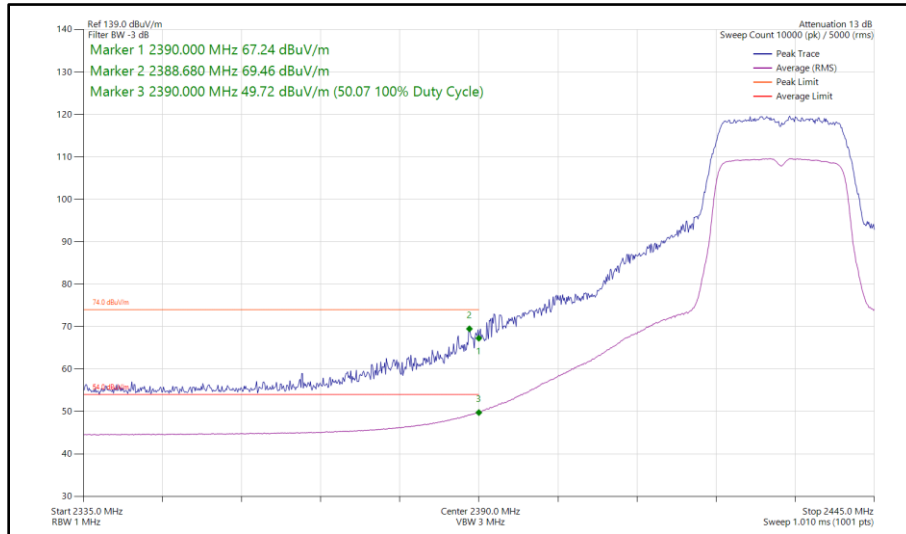


Figure 59 - 802.11n HT20, SISO, Core 1 - 2432 MHz  
Band Edge Frequency 2390 MHz

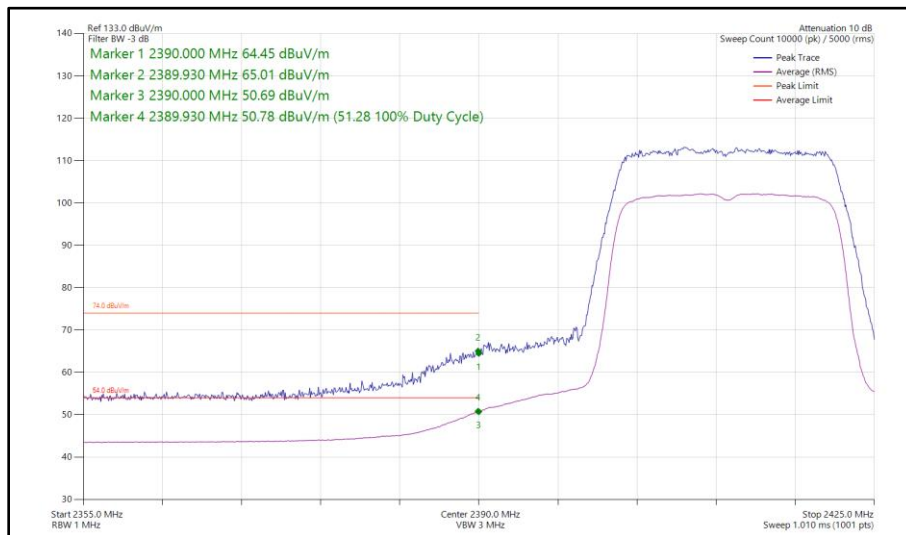


Figure 60 - 802.11ax HE20, SU, SISO, Core 1 - 2412 MHz  
Band Edge Frequency 2390 MHz

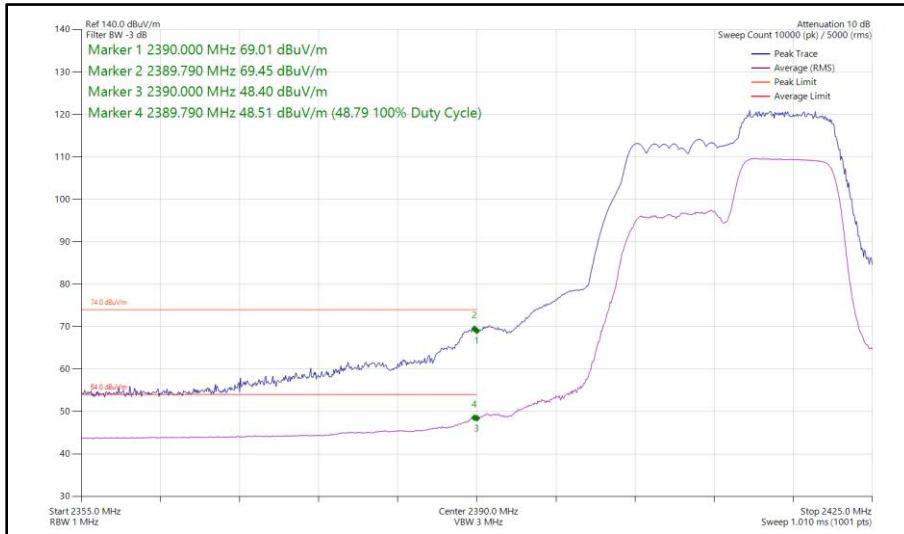


Figure 61 - 802.11ax HE20, RU 106-54, SISO, Core 1 - 2412 MHz  
Band Edge Frequency 2390 MHz

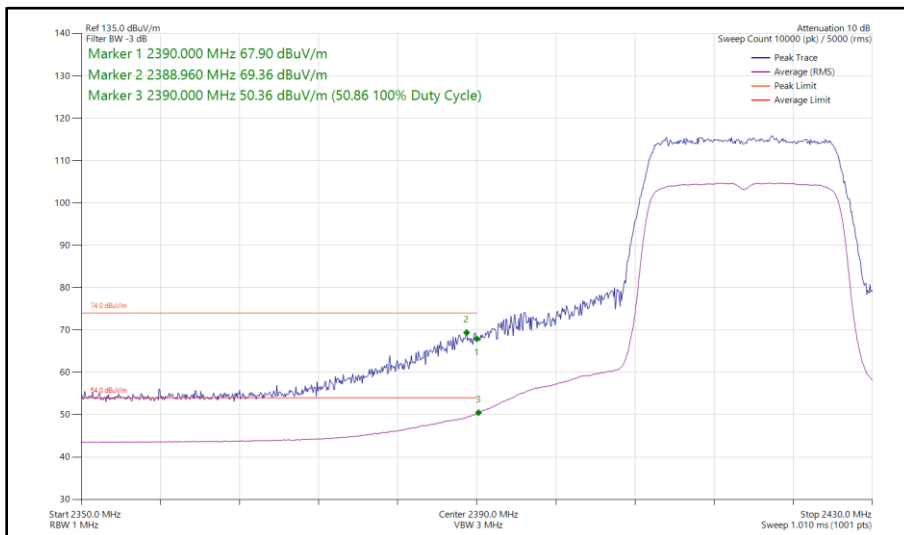
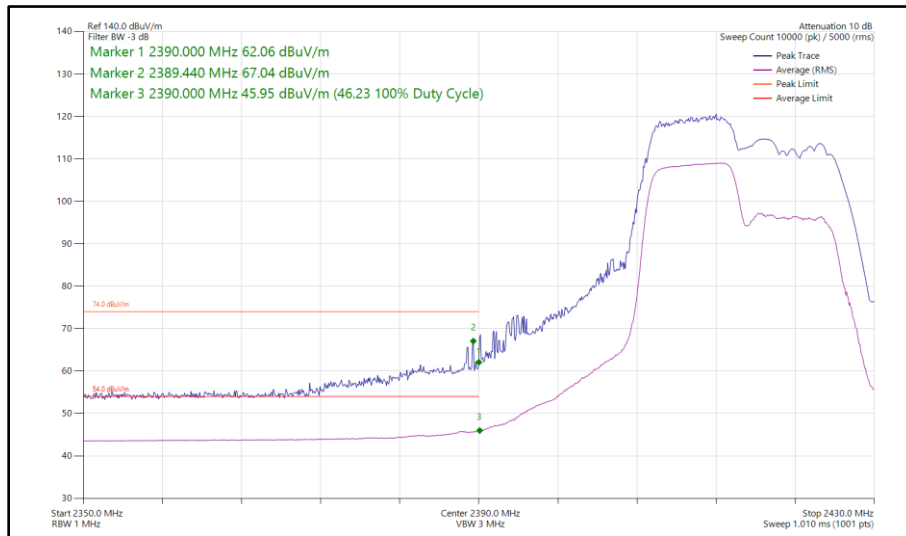
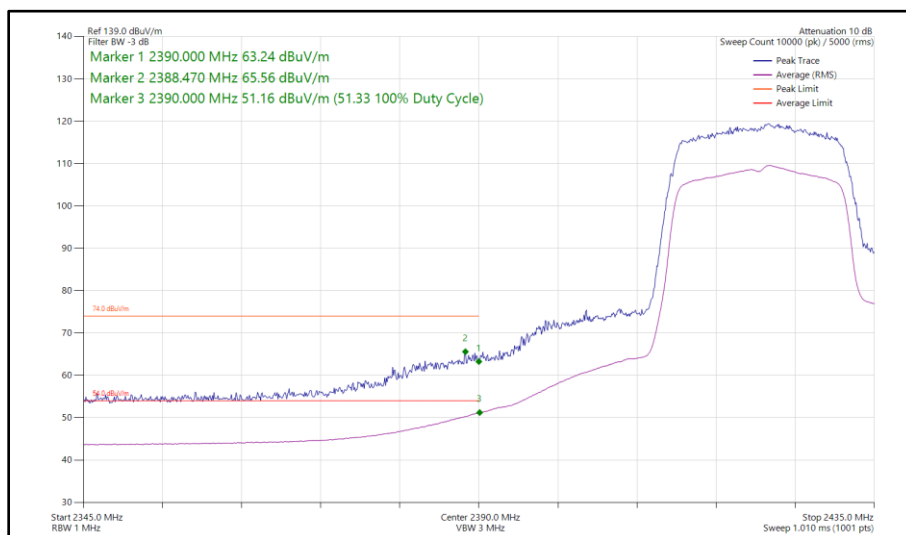


Figure 62 - 802.11ax HE20, SU, SISO, Core 1 - 2417 MHz  
Band Edge Frequency 2390 MHz



**Figure 63 - 802.11ax HE20, RU 106-53, SISO, Core 1 - 2417 MHz  
Band Edge Frequency 2390 MHz**



**Figure 64 - 802.11ax HE20, SU, SISO, Core 1 - 2422 MHz  
Band Edge Frequency 2390 MHz**